BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	:	
Appropriate Framework for Broadband Access to the Internet over Wireline Facilities	:	**CC Docket No. 02-33**
	:	
Universal Service Obligations of Broadband Providers	:	**CC Docket No. 95-20, 98-10**

COMMENTS OF THE PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE, THE MAINE PUBLIC ADVOCATE, THE MARYLAND OFFICE OF PEOPLE'S COUNSEL, THE OHIO CONSUMERS' COUNSEL, THE UTILITY REFORM NETWORK, THE CALIFORNIA OFFICE OF RATEPAYER ADVOCATES, THE CONNECTICUT OFFICE OF CONSUMER COUNSEL AND THE NEW HAMPSHIRE OFFICE OF CONSUMER ADVOCATE

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LIST OF ACRONYMS

ADSL	Asymmetric Digital Subscriber Line
ARMIS	Automated Reporting Management Information System
ATM	Asynchronous Transfer Mode
BISP	Broadband Internet Service Provider
BT	British Telecommunications
CA ORA	California Office of Ratepayer Advocates
CT OCC	Connecticut Office of Consumer Counsel
CLEC	Competitive Local Exchange Carrier
DLEC	Data Local Exchange Carrier
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Service Access Multiplexer
FCC	Federal Communications Commission
HUNE	High-Frequency Unbundled Network Element
ILEC	Incumbent Local Exchange Carrier
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
IXC	Interexchange Carrier
LEC	Local Exchange Carrier
LRIC	Long Run Incremental Cost
MBPS	Megabytes per Second
MD OPC	Maryland Office of the People's Counsel
ME PA	Maine Public Advocate
NASUCA	National Association of State Utility Consumer Advocates
NH OCA	New Hampshire Office of Consumer Advocate
NPRM	Notice of Proposed Rule Making
NYSDPS	New York State Department of Public Service
OFTEL	Office of Telecommunications (United Kingdom)
OH OCC	Ohio Consumers' Counsel
PA OCA	Pennsylvania Office of Consumer Advocate
PA PUC	Pennsylvania Public Utility Commission
PICC	Primary Interexchange Carrier Charge
PSTN	Public Switched Telephone Network
SBC	SBC Communications, Inc.
SLC	Subscriber Line Charge
SNET	Southern New England Telephone Company
TELRIC	Total Element Long-Run Incremental Cost
TSLRIC	Total Service Long-Run Incremental Cost
UNE	Unbundled Network Element
TURN	The Utility Reform Network
UNE	Unbundled Network Element
USF	Universal Service Fund
VDT	Video Dialtone
xDSL	Digital Services Line (Symmetric or Asymmetric)

1 Introduction

On February 15, 2002, the Federal Communications Commission ("FCC") released a Notice of Proposed Rulemaking ("NPRM") in the above-captioned proceeding launching an examination of the appropriate legal and policy framework under the Telecommunications Act of 1996 ("TA-96") for broadband access to the Internet provided over domestic wireline facilities. The FCC notes that the Commission's broadband policy will "first and foremost be guided by, and grounded in, TA-96" and that, as a policy matter, the statutory objectives of promoting competition and universal service have not changed.[1] The FCC then tentatively concluded that what it called "wireline broadband Internet access services" – whether provided over a third party's facilities or self-provisioned facilities – are information services subject to regulation under Title I of TA-96.[2]

The Pennsylvania Office of Consumer Advocate ("PA OCA"), the Maine Public Advocate ("ME PA"), the Maryland Office of People's Counsel ("MD OPC"), the Ohio Consumers' Counsel ("OH OCC"), the California Office of Ratepayer Advocates ("CA ORA"), New Hampshire Office of Consumer Advocate ("NH OCA"), and the Connecticut Office of Consumer Counsel ("CT OCC") are each individually authorized by their respective state statute to represent the interests of utility consumers in their state in both state and federal courts and agencies.[3] The Utility Reform Network ("TURN") is a non-profit consumer advocacy organization that has represented the interests of California residential and small business telecommunications ratepayers before state and federal regulators since 1973 and joins in these Comments as well. The PA OCA, ME PA, MD OPC, OH OCC, CA ORA, CT OCC, NH OCA, and TURN (collectively referred to as "Consumer Advocates") are actively involved in

1. NPRM at ¶2.

2. Id. at ¶¶16, 17.

3. See 71 P.S. §309-2 (PA OCA); 35-A MRSA section 1700 et seq. (ME PA); Md. Ann., PUC Sec. 2-201 – 2-205 (1999) (MD OPC); Chapter 4911, Ohio Rev. Code (OH OCC); State of California Public Utilities Code Section 309.5(a)-(g) (CA ORA); Connecticut General Statutes §16-2a (CT OCC); New Hampshire RSA 363:28 (NH OCA).

representing consumer interests in telecommunications issues and are, therefore, familiar with the issues contained in this NPRM.[4]

2 Purpose of the Statement

The Federal Communications Commission has recommended that where "broadband Internet access services" are supplied over telecommunications infrastructure, and if no underlying transmission service is also supplied at the wholesale level, then the broadband Internet access service should be classified as an information service.[5] The Consumer Advocates submit that the FCC's characterization of the bundle of services, wireline broadband service, and Internet access services as a single service is incorrect. The classification of these many functions as a single service based upon whether the incumbent local exchange carriers (ILECs) sell the underlying transmission separately gives the ILECs far too much control over competitive access to their bottleneck facilities. This issue is further discussed in Section 4 of these comments.

Under the FCC's proposal, such "information services" are regulated under Title I of the *Telecommunications Act*.[6] In light of this, the Federal Communications Commission has sought comment on how to:

> ensure that services supported by universal service bear no more than a reasonable portion of the costs associated with facilities used to provide both supported services and unsupported Internet access. [The FCC questions…] the general sufficiency of our existing allocation rules and policies in a broadband

4. Gabel Communications of Massachusetts assisted with the production of this document, particularly with regard to the cost allocation issues.

5. In the Matter of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers, Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements, CC Docket No. 02-33, 95-20, 98-10. Notice of Proposed Rulemaking, February 15, 2002, Paragraph 17. (Hereafter referred to as the "Broadband NPRM" or "NPRM").

6. Id. at ¶16.

> environment and whether those rules should be modified in order to meet the requirements of section 254(k).[7]

This issue must be resolved regardless of the classification of how such broadband services are classified. Sections 5-8 these comments represent the response of the Consumer Advocates to this request.

At the outset, we must emphasize that the Public Switched Telephone Network ("PSTN") is being designed to provide advanced telecommunication services, and that this overriding fact must be taken into consideration in the allocation of joint costs as they may apply to various services whether or not they are supported by universal service. We are in agreement with the Commission that the PSTN is increasingly being designed to provide advanced services.[8] Cost recovery allocations are necessary to ensure that costs are recovered in a way that is consistent with telecommunications and information law, and that universal service obligations are properly borne by the cost-causing services.

Section 9 of these comments addresses the issue of how wireline broadband Internet access services should contribute to the FCC's Universal Service Fund (USF). The Consumer Advocates submit that the funding for the USF should encompass a broad range of interstate services. If broadband service or Internet access service is classified as an interstate service, such services should make an appropriate contribution.

3 Summary of Comments

The Consumer Advocates submit the following findings and recommendations:

Classification of Service

- Wireline Broadband Internet Access Service Should Not Be Declared An "Information Service" Like Cable Modem Access Because Such A Determination Would Effectively

7. Id. at ¶83.

8. Id. at ¶¶ 7, 12, 36.

Rewrite TA-96 And Limit The FCC's Ability To Achieve Important Congressional And FCC Goals (Section 4.1.1);

- The FCC Is Effectively Attempting To Rewrite TA-96, Acting Outside The Boundaries Of Its Regulatory Ability And, Therefore, Should Not Reclassify Wireline Broadband Internet Access Services As "Information Services" (Section 4.1.2);

- The FCC Must Continue To Recognize That Much Of Wireline Broadband Internet Access Service Remains A Telecommunications Service(Section 4.2);

- The FCC's Classification Of Wireline Broadband Internet Access Services Should Ensure Competitors Access To Those Parts Of The Telephone Network Necessary To Provide Those Services Competitively (NPRM ¶¶46-48, 50-52, 61-62) (Section 4.3);

- The FCC's Classification Of Wireline Broadband Internet Access Services Should Allow For State Commissions To Require Unbundling To Ensure The Diverse Provisioning Of These Services (Section 4.4);

- Reclassifying Wireline Broadband Internet Access Services As "Informational Services" May Slow The Deployment Of Advanced Telecommunications Capability Under Section 706 Of TA-96 (NPRM ¶29) (Section 4.5); and

- The FCC Should Further Ensure That The Basic Public Protections Of Telecommunications Service Providers Remain In Effect Regardless Of How Wireline Broadband Internet Access Services Are Classified (NPRM ¶¶54-58) (Section 4.6).

Cost Allocation

- Cost Allocation Issues Must Be Addressed By The Commission Regardless Of A Decision Categorizing Broadband Services As An Information Service Or Telecommunication Service (Section 5);

- The Allocation Of Shared Telephony Costs Proposed By The Consumer Advocates Ensures That Incremental Costs Are Covered, And That Costs Are Efficiently Allocated Based On Sound Economic Principles And Competitive Market Prices (Section 5.1);

- An Example of the Proper Cost Allocation -- The Wholesale Transmission Price Less Incremental Cost (Section 5.2);

- The Network Is Increasingly Characterized By Shared Costs -- Requiring (Section 5.3);

- The Shared Provision Of Information And Telecommunications Services Over The Telecommunications Network Leads To Shared Costs Which Must Necessarily Be Allocated For The Information Services (Section 5.4);

- The Network Is Increasingly Being Designed To Provide Multiple Forms Of Advanced Services, And This Will Increase The Need For Proper Allocation Of Shared Costs (Section 5.5);

- Incremental Cost Data Can Be Supplied By The Wireline Telecommunications Carriers, While Broadband Transmission Price Data Can Be Provided In An Incentive-Compatible Manner By The Affected Wireline Telecommunications Carriers And Audited By Independent Suppliers (Section 7.1);

- The Current Cost allocation system used by the Commission is not set up to deal with the loop being used for both broadband and voice services, and cannot properly allocate costs between information services and telecommunications services.

- The Commission Should Allocate To Broadband Transmission A Share Of Costs Based On The Lowest Price Set By An Independent Supplier Less The Incremental Cost Of Broadband Transmission (Section 7.2).

Universal Service

- The FCC Has A Legal Basis To Require Providers Of Wireline Broadband Internet Access Service To Contribute To Universal Service Because TA-96 Specifically Enables The Commission To Assess Universal Service Contributions On Providers Of Interstate Telecommunications (Section 9.2);

- The FCC Should Require Wireline Broadband Internet Access Service Providers To Contribute To Universal Service Support Because It Is In The Public Interest For Those Providers To Contribute To The Preservation And Advancement Of Universal Service (Section 9.3); and

- This Commission Should Require Wireline Broadband Internet Access Service Providers To Contribute To Universal Service Support Because Those Providers Have Built Their Businesses Upon The Value Subscribers Place On High-speed Access To Content Available Through The Public Switched Telephone Network (Section 9.4).

4 Classification of Wireline Broadband Internet Access Services

4.1 Introduction

The Consumer Advocates recognize the FCC's efforts to promote ubiquitous broadband deployment to bring valuable new services to consumers, stimulate economic activity, improve national productivity and advance economic opportunity for the American public.[9] The

9. NPRM at ¶1.

Consumer Advocates appreciate the FCC's attention to broadband issues as evidenced by the three other proceedings currently underway that focus on the regulatory treatment of broadband.[10] The FCC has indicated that this proceeding is the functional equivalent to the Cable Modem Proceeding in which the FCC recently released a Declaratory Order, but that this proceeding examines broadband Internet access services provided by entities that are using the traditional telephone platform to offer that service.[11] The FCC's findings in the Cable Modem Declaratory Order are relevant, but not binding here.[12]

The FCC has addressed the issue of how to treat Internet access on many occasions in the past as well as the issue of what constitutes an "information service" and a "telecommunications service".[13] In this proceeding, the FCC seeks the appropriate classification of wireline broadband Internet access services and tentatively concludes that these services, whether provided over a third party's facilities or self-provisioned facilities, are information services subject to regulation under Title I of TA-96. The FCC now seeks comment on this tentative conclusion.[14] The FCC's tentative conclusion is incorrect. Such classification runs counter to the Congressional intent to unbundle ILEC networks and will likely discourage future innovation concerning broadband services. In any event, the FCC must properly account for the cost of a network that is increasingly being used to provide both broadband and traditional voice services.

10. See, Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Notice of Inquiry, 15 FCC Rcd 19287 (2000), Review of Regulatory Requirements for Incumbent LEC Broadband Services, CC Docket No. 01-337, Notice of Proposed Rulemaking, 16 FCC Rcd 22745 (rel. Dec. 20, 2001), and Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, Notice of Proposed Rulemaking, FCC 01-361, 16 FCC Rcd 22781 (rel. Dec. 20, 2001).

11. NPRM at ¶9.

12. The Cable Modem Proceeding left USF contributions by cable modem Internet access services as an open question to be resolved here in this NPRM.

13. See NPRM at ¶¶10-15 (citations omitted).

14. NPRM at ¶¶16-17.

In requiring telephone companies to unbundle the various elements of their telephone network, Congress recognized the "last mile" as an essential facility that must be shared by those telephone companies. The FCC has had a longstanding national policy to promote ubiquitous telephone service. For decades, a protected monopoly existed for local telephone companies so that the telephone network could be extended, in return for a reasonable return similar to other utility networks. Such policy has not existed for the cable industry. The telephone network allowed consumers to communicate; the more consumers on the network, the better. Until the advent of cable modem Internet access, communication over cable networks was one-way only.[15] ILECs have received significant public support so that the telephone network would be extended universally to all consumers. This adequately distinguishes cable networks from the telephone network. The FCC cannot now ignore the ILECs' dominance in this area and allow the owner of the bottleneck facility to use that facility to leverage market power into directly related competitive markets over the ILECs' network.

Attributing to Congress a vision of exclusively inter-modal, exclusively facilities-based competition is entirely unsupported. Rather, Congress imposed unbundling requirements on ILECs because it is economically inefficient for competitive telephone companies to connect to every home and business with a redundant last mile link. Congress also specifically allowed competition by resale, which is totally non-facilities-based.

4.1.1 Wireline Broadband Internet Access Service Should Not Be Declared An "Information Service" Like Cable Modem Access Because Such A Determination Would Effectively Rewrite TA-96 And Limit The FCC's Ability To Achieve Important Congressional And FCC Goals

The FCC should not reclassify wireline broadband Internet access service as an "information service" because such a determination would effectively rewrite TA-96 and limit the FCC's ability to achieve other important Congressional and FCC goals. Notwithstanding the FCC's recent Declaratory Order in the Cable Modem proceeding, Congress clearly intended to treat the cable industry separate from the telecommunications industry when enacting TA-96.

15. The one-way nature of cable service also meant that cable networks did not need to be interconnected, another difference from the telephone network.

Therefore, the FCC's tentative conclusion to treat the varying platforms used by the cable and telephone industries similarly is incorrect.[16] Generally, the Consumer Advocates object to effectively repealing the competitive access requirements in the telecommunications industry in order to replicate the lack of access inherent in the cable provisions of TA-96.

Congress' intent is evident by the separate and distinct sections of TA-96 within which Congress addresses cable and telephone services. Furthermore, the FCC should not treat the telephone and cable networks similarly because TA-96 specifically delineated telephone interconnection and unbundling responsibilities that cable operators are not required to follow. These specific and extensive obligations placed on local telephone companies by Congress evidence the need to maintain open access for competitors to the telephone network.

Cable and telephone platforms were not intended by Congress to be treated the same. By treating these diverse platforms similarly, as proposed in the NPRM, the FCC is rewriting TA-96, making new law and acting beyond its powers.

4.1.2 The FCC Is Effectively Attempting To Rewrite TA-96, Acting Outside The Boundaries Of Its Regulatory Ability And, Therefore, Should Not Reclassify Wireline Broadband Internet Access Services As "Information Services"

As recognized on many occasions by Chairman Powell, it is the FCC's role to implement, not make, law. Federal agencies are limited in the scope of their abilities and must act within the bounds of the laws created by Congress that they are entrusted to implement and enforce. The FCC, therefore, should reverse its tentative conclusion that wireline broadband Internet access services are information services because such conclusions constitute the FCC overstepping its jurisdictional authority through the making of law. Congress' intent in TA-96 was clear and the FCC is now acting contrary to that intent. Title I of TA-96 is also likely to be a poor substitute to

16. See also NPRM at ¶¶44-45. As discussed below, the Cable Modem Declaratory Order is not precedent for a decision in this proceeding. The fact that the FCC has declared cable modem Internet access to be an information service should not have preclusive effect for wireline broadband Internet access over the PSTN, which has an entirely different technological and regulatory history behind it.

the existing regulations governing wireline broadband Internet access services, particularly as Congress has specifically articulated otherwise.

FCC Commissioner Copps recognized the nature of the FCC's actions in this NPRM in his dissenting statement. There, Commissioner Copps stated:

> Of course, we need to ask questions to make intelligent decisions. I would therefore have been open to a balanced notice that recognized the current statutory situation and regulatory structure and that sought to examine our rules in light of technology evolution and the increasing convergence of services, technologies, and markets. Our interpretations of telecommunications, telecommunications services and information services need to be looked at in the context of the times and the pace of technological convergence. But before we commit ourselves, even "tentatively," to specific and potentially drastic changes to our precedent that carry with them enormous impacts in the market, we should better understand the implications of our conclusions. We have not done so here, and I fear we are out-driving the range of our headlights.[17]

Commissioner Copps further recognized that it is the FCC's responsibility to implement TA-96 as Congress intended and that the NPRM failed to analyze the FCC's previous determinations that arrived at conclusions contrary to this NPRM. Commissioner Copps asserted that the FCC is removing competitive, universal service, and consumer protection provisions from unbundling, disability, privacy, slamming and rate issues addressed throughout TA-96,[18] and the Consumer Advocates agree.

The FCC is acting outside the boundaries of its regulatory authority in reaching its tentative conclusions in this NPRM. The FCC should not reclassify wireline broadband Internet access services as "information services". The FCC should be implementing TA-96 as written by Congress but here is rewriting fundamental precepts of TA-96.

17. See Separate Statement of Commissioner Michael J. Copps, Dissenting in Part, Concurring in Part, at 1.

18. Id. at 2.

4.2 The FCC Must Continue To Recognize That Much Of Wireline Broadband Internet Access Service Remains A Telecommunications Service

The FCC bases its reclassification of wireline broadband Internet access services as an "information service" on, *inter alia*, the fact that the providers of these services offer more than a transparent transmission path to end-users and offer enhanced capabilities.[19] In doing so, the FCC indicates that it "views wireline broadband Internet access service as not consisting of two separate services, but as a single integrated offering to the end-user."[20] This conclusion is fundamentally in error. As discussed throughout these Comments, the implications of this reclassification are dramatic. The FCC must continue to recognize that much of wireline broadband Internet access services remains a telecommunications service no matter how the service may be bundled and sold.

The bundle of wireline broadband Internet access services sold to the public frequently offers the "information service" capability for "generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications" as the FCC recognizes.[21] Most importantly, the Information Service definition states that such information service functions do not relate to "any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service."[22] Yet, the same bundle also involves the "telecommunications service" capability for "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." Thus, wireline broadband Internet access services involve both telecommunications and information. Under TA-96, such services must clearly be considered as a telecommunications service. Yet, classifying these services as only "information services"

19. NPRM at ¶20.

20. NPRM at ¶21.

21. 47 U.S.C. §153(43). DSL Internet access, for example, often involves the opportunity to "store" data on a web page as part of a bundled service.

22. 47 U.S.C. §153(43).

does not recognize the fundamental transmission of information that underlies any digital subscriber line ("DSL") service.

The fundamental flaw in the FCC's reasoning is its assumption that there is a single service that can be called "wireline broadband Internet access service". In addition, the FCC's conclusion, as based on that assumption, is that "wireline broadband Internet access services are information services with a telecommunications service component" is thus equally flawed.

There are two services often involved: first, the broadband transmission capability (which is a telecommunications service); and second, the Internet access component (which is an information service). Together, these two services allow consumers broadband access to the Internet over wireline facilities.

Indeed, there are two services involved in all the common forms of Internet access:

- When a customer uses dial-up access to the Internet, there are two services involved: dial-up service (provided by a LEC) and Internet access service (provided by an ISP). Where there is local competition, the customer has wireline competitors for the dial-up access.[23] The customer also has the option of purchasing service from an independent ISP in many instances. Customers can often purchase the services separately, or as a bundle.

- When a customer uses wireline broadband access to the Internet, there are also two services involved: xDSL service (provided by a LEC) and Internet access service, often provided by the LEC, its affiliate, or an independent third party.[24] This definition and division of services is consistent with prior Commission

23. If the customer is unlucky, he lives in an area where there is no ISP within the local calling area. In that event, an interxchange carrier (IXC) may also become involved.

24. Some ILECs, e.g., Sprint in Pennsylvania, sell DSL separately, without Internet access service, and allow the consumer to separately purchase Internet access service from a second vendor. NPRM at ¶¶ 20, 22, 23.

rulings.[25] Again, where there is local competition, the customer has wireline competitors for the DSL service. The customer also has competitive alternatives in taking service from an ISP.[26] Customers can purchase the services separately, or as a bundle.

- Finally, of course, with broadband access over cable, there are also two services involved: the cable modem service from the cable company and Internet access service, typically but not always provided by the cable company.[27] In those localities where there is local cable competition, the customer has competitors for the cable modem service. The customer may also have competitive alternatives in the selection of an ISP. Customers can purchase the services separately, or as a bundle.

- The same paradigm applies to wireless Internet access.

There is no technological or other requirement in any of these situations that the transmission service (whether telecommunications or cable service[28]) be provided by the same company that translates the communication and puts it on the Internet. Companies may find efficiencies in marketing a service that encompasses both wireline broadband service and Internet access service. *Only* in those situations does it even make sense to talk about "wireline broadband Internet access service", which is actually a bundle of services (one telecommunications service and one information service).

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25. NPRM at ¶ 26.

26. Access to alternative ISPs is technologically feasible with DSL. To the extent that LECs tie the provision of DSL to Internet access from affiliated ISPs, their actions are anti-competitive.

27. As previously noted, cable operators are not required to allow access to other ISPs. In the FCC order approving the America Online/Time Warner merger, the FCC required the merged company to allow access to multiple ISPs.

28. In which the content *is not* modified.

The NPRM obscures the definitions of these services, and this has significant ramifications, as recognized by Commissioner Copps and discussed more thoroughly below. The NPRM attempts to distinguish between "providing" telecommunications and "using" telecommunications by stating that:

> an entity *provides* telecommunications only when it both provides a transparent transmission path *and* it does not change the form or content of the information. ... "when an entity offers subscribers the 'capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information *via telecommunications*,' it does not *provide* telecommunications, it is *using* telecommunications.[29]

This analysis obscures the fact that wireline broadband service and Internet access service can be obtained from different providers; the mere coincidence of a LEC providing a bundle that includes both broadband service and Internet access cannot change two services into one. Moreover, it cannot obscure that the broadband service provided by the LEC is a telecommunications service, with all the corresponding regulation of such services under TA-96.

The FCC's analysis in the NPRM specifically addresses only the bundle[30] and does not consider that the services can and are provided separately.[31] An ILEC's DSL service could be provided to a customer either with or without an ILEC-affiliated ISP service.[32] CLECs often purchase DSL from ILECs, and sell it to customers with or without a CLEC-affiliated ISP. In addition, as mentioned in the NPRM,[33] ISPs can purchase DSL and sell it to customers as part of a bundle that includes the ISP's own Internet access. The decision about how a LEC wishes to

29. NPRM at ¶19, quoting, Report to Congress, 13 FCC Rcd 11501, 11521, para. 41 (rel. April 10, 1998) (emphasis supplied).

30. NPRM at ¶¶ 20-24.

31. NPRM at ¶27.

32. See e.g., http://www.qwest.com/residential/products/dsl/index.html.

33. NPRM at ¶26.

bundle and market broadband service should not drive the application of TA-96 to these same services.

The use of broadband equipment, such as a Digital Subscriber Line Service Access Multiplexer ("DSLAM") and an ATM switch, does not mean that an information service is being used. Rather, the information service is provided only by the ISP at the other end of the telecommunication path. The NPRM appears to recognize the telecommunications portion of the combined service provided by the carrier, but disguises the telecommunications service as an underlying telecommunications activity that is part of an information service.

Moreover, by effectively allowing any communications to be classified as an information service because it travels over the high frequency portion of the loop,[34] the NPRM leaves open the possibility that voice will also become an information service if it were to travel across the high frequency portion of the loop. If voice becomes an information service, then Title II regulation may effectively disappear. The Consumer Advocates are also concerned that universal service and consumer protections may disappear as well.

Other portions of TA-96 support the proposition that the FCC must continue to recognize that much of wireline broadband Internet access services remains a telecommunications service. For example, section 706, as discussed more thoroughly below, uses and defines the term "advanced telecommunication capability" as "high speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology."[35] In TA-96, the FCC is directed by Congress to encourage the deployment of advanced telecommunications capability to all Americans in a reasonable and timely fashion.[36] Congress' intent is clear that the telecommunications nature of broadband services is explicit. Therefore, the FCC's treatment of

34. NPRM at ¶25.

35. 47 U.S.C. §706(c)(1).

36. 47 U.S.C. §706(a),(b).

broadband service should continue to be as a telecommunications service. Whether or not the Internet access component is an information service, there is an underlying telecommunications service being used. The FCC cannot, by regulatory fiat, disregard the telecommunications service aspect.

4.3 The FCC's Classification Of Wireline Broadband Internet Access Services Should Ensure Competitors Access To Those Parts Of The Telephone Network Necessary To Provide Those Services Competitively (NPRM ¶¶46-48, 50-52, 61-62)

Throughout the NPRM, the FCC discusses the impact of the classification of wireline broadband Internet access services on ILECs' obligations to provide access to the wireline broadband network. The FCC first seeks comment on whether the access and unbundling requirements of the *Computer Inquiry* proceedings should be imposed on wireline broadband Internet access service providers to encourage further deployment of these services.[37] The NPRM further seeks comment on whether the removal of all unbundling requirements would motivate ILECs to only provide broadband transmission as part of integrated information services in order to restrict its availability or whether there would be countervailing reasons why carriers would still choose to provide high-speed transmission to other entities on a stand-alone basis.[38] Finally, the NPRM discusses more thoroughly the implications of the classification of

37. NPRM at ¶¶46,50-51. Consumer Advocates generally suggest that having multiple providers for DSL services is a better strategy to encourage deployment of those services. In an article concerning the deployment of broadband service in South Korea at http://www.pyramidresearch.com/static_content/feature_articles/001201_feature.asp, it is explained that: "In other words, a market with multiple providers of xDSL, cable modem and LMDS, for example, is better than a market with just one provider of each." Therefore if the FCC closes the DSL option to Data Local Exchange Carriers ("DLECs"), the Commission would be running counter to the observation that having multiple DSL providers promotes the rapid deployment of advanced telecommunications services. It is questionable whether the termination of unbundling obligations under TA-96 would be in violation of section 706 of TA-96. The FCC has also not cited any studies to suggest that closing out DSL competitors of the ILECs would accelerate the deployment of advanced telecommunications services.

38. NPRM at ¶52.

these services on ILECs' formal obligation to provide access to network elements under section 251 and 252 of TA-96.[39]

FCC Chairman Powell recognized that one achievement of TA-96 was that it "unleashed broadband" and forced ILECs to "bring DSL out of the closet".[40] As such, wireline broadband interconnection requirements should be maintained so that the provision of such Internet access services can continue to flourish and diversify. It is possible that, if the FCC had originally defined wireline broadband Internet access services as an information service when TA-96 was passed, DSL might still be in the closet today.

ILECs should continue to be subject to the same unbundling requirements for wireline broadband services that are currently in place, such that ILECs must continue to make unbundled loops and DSLAMs available to the alternative service providers, also known as DLECs, as an unbundled network element ("UNE"). Excluding competitors from such UNEs would inhibit competition in the wireline broadband service market and would negate years of pro-competitive efforts by Congress, the FCC, and various state commissions who seek diversity in the supply of these services. The ability to access broadband network elements, as articulated in section 251 of TA-96, is critical to bringing competition to this market.[41] Many in the telecommunications industry credit TA-96 as being "ultimately responsible for the creation of broadband technology" and "accelerate[ing] the development of DSL ... which would have taken years to mature"[42] based on the interconnection requirement in Section 251.

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39. NPRM at ¶61.

40. Rohde, David, Powell Boosts Deregulation – For Real, IT World.Com, February 6, 2001.

41. See also Comments of the Pennsylvania Office of Consumer Advocate, the Ohio Consumers' Counsel, the New Hampshire Office of Consumer Advocate, the West Virginia Consumer Advocate Division and the Maryland Office of People's Counsel, CC Docket No. 01-338, filed April 5, 2002.

42. Thompson, Jim, Telecom Act Birthday Not So Happy: Clamor for change threatens CLEC survival. CLEC World April 20, 2001.

In fact, in 1998, only about 20 percent of American households had access to broadband services while, today, that number has jumped to about 70 percent.[43] The interconnection obligations of sections 251 and 252 are at the heart of these market-opening provisions which required ILECs to deploy wireline broadband Internet access services to keep pace with other such service providers.

The FCC further seeks comment on whether, if a regulatory framework is necessary, how such a framework could reduce the regulatory burdens on wireline broadband providers while promoting the availability of broadband to both competitors and consumers, and how a regulatory framework would encourage market participants to deploy broadband networks more expeditiously and increase facilities-based competition.[44] The Consumer Advocates are concerned that the reclassification of such services, and the implicit elimination of regulatory jurisdiction of those services, would likely eliminate some regulatory mechanisms that attempt to encourage service deployment – particularly in more rural and remote areas.

Further, removing the requirements of unbundling broadband network elements would motivate ILECs to limit, if not eliminate, the provision of such elements to competitors. ILECs would have no incentive to provide to CLECs' access to these elements if the CLECs were to use them to provide service that diminishes the ILECs' market share and profits. Congress dictated competitors' access to unbundled network elements because it realized that, on their own, local telephone companies would have little reason to offer advantageous access to their network. It was Congress' intent to diversify the supply of these services. By removing the ILECs' obligations to lease unbundled broadband network elements, the FCC will ensure that CLECs will have greater difficulty in contributing to that diversity, as many of the CLECs depend on the broadband UNEs to provide service.

Removal of the unbundling and resale requirements would lead to a significant reduction in the availability of high-speed transmission to ISPs. Very few ISPs provide their own facilities

43. Id.

44. NPRM at ¶51.

for customer access because ISPs do not have the resources to provide their own underlying transmission. ILECs should continue to be required to offer high-speed telecommunications services through UNEs and resale arrangements.

When addressing the implications of reclassifying wireline broadband Internet access services as "information services" on ILECs obligations to provide access network elements under sections 251 and 252 of TA-96, the FCC must ensure that such access continues to be provided to alternative providers other than the ILECs. This is best done, as argued above, by recognizing that "wireline broadband Internet access service" is actually two services. The FCC must maintain its line sharing and line splitting rules for the wireline broadband service component.[45]

The FCC's ultimate classification of wireline broadband Internet access services should ensure competitors' access to those parts of the PSTN that are necessary so that competitors can provide broadband and Internet access services competitively. To do so, the FCC must continue to recognize that much of wireline broadband Internet access service remains a telecommunications service.

4.4 The FCC's Classification Of Wireline Broadband Internet Access Services Should Allow For State Commissions To Require Unbundling To Ensure The Diverse Provisioning Of These Services

Intertwined in the issue of access obligations for wireline broadband Internet service providers is the extent to which state commissions can regulate these services, including establishing ILECs unbundling obligations for these services, so as best to meet the needs of their specific state. In the NPRM, the FCC seeks comment on whether wireline broadband Internet access service providers' access obligations could be imposed generally or on a state-by-state basis.[46] The NPRM also draws a connection with section 271 approval that is also done on

45. See 47 C.F.R. §51.319(h) (requiring ILECs to provide non-discriminatory access to the high frequency portion of the loop in accordance with FCC rules).

46. NPRM at ¶48.

a state-by-state basis. Finally, the NPRM seeks comment generally on the role of the states with respect to wireline broadband Internet access services if the FCC were to find it to be appropriately classified as an information service.[47] The FCC's classification of wireline broadband Internet access services should continue to allow for state commissions to require unbundling in each state to ensure the diverse provisioning of these services.

The FCC has recently recognized in its UNE triennial review that state commissions may be more familiar than the FCC with the characteristics of markets and incumbent carriers within their jurisdictions, and that state commissions should be able to recognize regional differences in determining UNE requirements such that entry strategies may be more sophisticated in recognizing regional differences.[48] State commissions should be able to require the unbundling of wireline broadband services network elements so each commission can best ensure the competitive provision of these services from diverse service providers. Thus, classifying wireline broadband Internet access services as "information services" may substantially limit state commissions' ability to regulate these services, and limit their ability to require ILECs to offer broadband network elements to CLECs as UNEs to further create a competitive market. Clearly, this would contradict efforts by the FCC to make the provision of these services both more competitive and widespread.

The FCC should ensure that state commissions retain the ability to require ILECs to offer broadband UNEs to DLECs. It is imperative that state commissions retain this ability. The Consumer Advocates submit that much of the broadband competition in many states for residential customers is premised on DLECs having the ability to provide wireline broadband Internet access services through broadband UNEs and resale. If the FCC did not allow state commissions to require ILECs to provide broadband UNE to DLECs, this portion of the DSL competitive market would likely disappear. The Pennsylvania Public Utility Commission ("PA

47. NPRM at ¶62.

48. See, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, Notice of Proposed Rulemaking (rel. December 20, 2001), at ¶75.

PUC"), for example, has recognized the importance of ILECs offering related UNEs in its Global Order[49] and DLECs competing in Pennsylvania have come to rely on the opportunity to serve customers through the use of UNEs. Broadband UNEs have been the basis for much of the limited residential broadband competition even in other states whose commissions have not been as firm on the necessity of offering broadband UNEs. If the FCC did not allow state commissions to require ILECs to provide broadband UNEs to DLECs, this portion of the competitive market would likely not develop and, in those areas DLEC competition would disappear.

It is unclear whether the FCC could compel such assurance pursuant to some other statutory or regulatory authority if these services are no longer considered "telecommunications services". Such uncertainty about other forms of regulation will likely damage competition. The FCC should not risk whether ILECs could be required to offer broadband UNEs to DLECs if these services are reclassified as "information services". The nature of the broadband market at this nascent stage could be disrupted if ILECs could refuse to offer DLECs access to their networks, especially under a claim of right. Therefore, the FCC must continue to recognize that much of wireline broadband Internet access services remains a telecommunications service.

State commissions must be able to determine what is best for their particular state's broadband marketplace. If the FCC were to reclassify wireline broadband Internet access services as "information services", state commissions may lose their ability to enforce valuable state consumer protections and further include these services as valuable pieces of their telecommunications environment. State commissions should be allowed to regulate wireline broadband Internet access services for issues of quality of service, fraud, billing, customer transfer, abandonment and a host of other issues state commissions are entrusted to monitor in the telecommunications arena. If these services were to be reclassified as "information services", state commissions would lose their ability to enforce these consumer protections.

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49. In Re: Nextlink Pennsylvania, Inc., 196 PUR 4th 172 (Pa. P.U.C. Sept. 30, 1999), affirmed, Bell-Atlantic Pennsylvania, Inc. v. Pennsylvania Public Utility Commission, 763 A.2d 440 (Pa. Commw. Oct. 25, 2000)("Global Order"), appeal docketed, No.1 EAP 2002 (Pa.).

For example, in Pennsylvania, Chapter 30 of the Public Utility Code specifically provides an alternative form of regulation for ILECs where increased earnings can be achieved in exchange for accelerating deployment of a "universally available, state-of-the-art, interactive, public-switched broadband telecommunications network."[50] Should the FCC reclassify wireline broadband Internet access services as "information services", the PA PUC may no longer be able to enforce the provisions of Chapter 30 and ensure that Pennsylvania ILECs are meeting their end of this regulatory compromise. Similarly, other state statutes may also be limited.

The FCC's classification of wireline broadband Internet access services should ensure competitor access to those parts of the telephone network necessary so that they can provide those services competitively. Any classification should also allow state commissions to require unbundling of broadband network elements in their state to ensure the competitive provision of these services. Should the FCC reclassify these services as "information services," competitors' access to ILECs networks to provide competing broadband services would be severely limited and state commissions ability to monitor and encourage broadband deployment, while ensuring valuable consumer protections, would be diminished. The FCC must affirm that it will maintain regulatory authority under TA-96 of broadband telecommunications services and allow states to continue to play a role in this area.

4.5 Reclassifying Wireline Broadband Internet Access Services As "Informational Services" May Slow The Deployment Of Advanced Telecommunications Capability Under Section 706 Of TA-96 (NPRM ¶29)

In the NPRM, the FCC seeks comment on whether wireline broadband Internet access services should be classified as an "advanced telecommunications capability" and on what relevance, if any, that section 706 of TA-96 has to the issues raised in this proceeding.[51] Reclassifying wireline broadband Internet access services as "information services" may slow the deployment of advanced telecommunications capability under section 706 of TA-96 because

50. 66 Pa.C.S. §3001(1).

51. NPRM at ¶29, citing 47 U.S.C. §157nt.

the FCC and state commissions will have less regulatory authority over the retail and wholesale provision of such services.

As indicated above, TA-96 directs the FCC to encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.[52] Advanced telecommunications capability is defined in TA-96 as "high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology".[53] Many states have also recognized the need to encourage the deployment of a universally available broadband telecommunications network.[54]

Reclassifying wireline broadband Internet access services as anything other than a telecommunications service may extinguish the regulatory obligations and provisions that such services now have and may jeopardize the deployment of broadband services. If these services were no longer considered telecommunications services, state commissions may not be able to further encourage their deployment as section 706, and many state statutes, provide. Furthermore, state commissions may no longer be able to require ILECs to unbundle or interconnect their existing advanced infrastructure capability to provide greater diversity of existing services. The more competitors that provide wireline broadband Internet access services the more attractive service offerings will be which will, in turn, allow for more subscribers. Broadband deployment became greater after the enactment of TA-96 and that the FCC should not now rewrite the mandates of this statute.

4.6 The FCC Should Further Ensure That The Basic Public Protections Of Telecommunications Service Providers Remain In Effect Regardless Of How

52. 47 U.S.C. §706(a).

53. 47 U.S.C. §706(c)(1).

54. See 66 Pa.C.S. §3001(1) (the Commonwealth of Pennsylvania finds and declares its policy to be to "maintain universal telecommunications services at affordable rates while encouraging the accelerated deployment of a universally available, state-of-the-art, interactive, public-switched broadband telecommunications network in rural, suburban and urban areas...").

Wireline Broadband Internet Access Services Are Classified (NPRM ¶¶54-58)

In the NPRM, the FCC seeks comment on the extent to which other obligations might be affected by classifying wireline broadband Internet access services as "information services" with particular regard to (i) national security, (ii) network reliability and (iii) consumer protection.[55] The FCC raises as an example the ability of a telecommunications carrier to unilaterally discontinue service to customers, and the impact of such reclassification on privacy, slamming and truth-in-billing issues.[56]

Continuing to classify wireline broadband Internet access services as a "telecommunications service" would continue the consumer protection provisions currently in place for such services. In particular, protections regarding service quality, switching service providers, truth-in-billing and service termination, at both the state and federal levels, can be maintained if these services are given existing protections which they are afforded as telecommunications services. Classifying wireline broadband Internet access services as "information services", however, would effectively extinguish the protections afforded by the years of regulatory oversight on these matters. Classifying these services as "information services" would do a great disservice to the public interest and also limits state commission's ability to continue to provide the existing consumer protections they have already determined are necessary in their respective states, as discussed further below.

The FCC should continue to classify wireline broadband Internet access services so that consumer protections currently in place are maintained. In particular, both state and federal regulators should be able to continue to regulate these service providers for privacy, slamming, truth-in-billing, quality of service issues and others.

4.7 Conclusion

55. NPRM at ¶54.

56. NPRM at ¶¶57-58.

The FCC should not reclassify wireline broadband Internet access services as "information services". The FCC should recognize that broadband service and Internet access service are separate services that are often offered as a bundle. The FCC should maintain the classification of broadband services, in order to recognize the importance of being a telecommunications service. The FCC is acting outside of the scope of its authority in reclassifying these services as "information services". Instead, the FCC should adopt a classification for these services to reflect accurately their dynamic and unique nature. In doing that, the FCC would further ensure the competitive provisioning of broadband services and state commissions' ability to exercise their authority on a variety of issues, including unbundling requirements and enforcing consumer protections, while encouraging the continued deployment of these services on a competitive basis.

5 Cost Allocation Issues Must Be Addressed By The Commission Regardless Of A Decision Categorizing Broadband Services As An Information Service Or Telecommunication Service

Cost allocation is, in fact, required regardless of whether or not broadband transmission is classified as an information service, telecommunication service, or just telecommunications (i.e., regardless of whether broadband transmission[57] is bundled with the retail information services and not independently available outside of the bundle from the specific ILEC).

Under Section 254 (k) non-competitive services may not be used to cross-subsidize products that are subject to competition, and thus cost allocation is essential for ensuring that no cross-subsidization occurs due to improper allocation of shared costs. A central reason for this statutory requirement is that Congress wanted to ensure that telecommunications suppliers could not use telecommunications revenues from services that are not competitive to subsidize entry into the provision of information services that are subject to competition. Without an appropriate allocation of shared costs, the subsidization of services subject to competition (e.g., broadband services) by non-competitive ones (regulated voice services) is possible, and the playing field is

57. Throughout this section, "broadband transmission" refers to broadband transmission over the local loop, that is, not including transmission beyond the central office.

tilted in favor of the companies providing regulated services. As Section 254(k) of TA-96 requires:

> A telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition. The Commission, with respect to interstate services, and the States, with respect to intrastate services, shall establish any necessary cost allocation rules, accounting safeguards, and guidelines to ensure that services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services.[58]

According to the Notice of Proposed Rulemaking (NPRM), although a broadband Internet access service supplied by a wireline telephone company is an information service, it makes use of a transmission over wireline, that is, telecommunications.[59] As discussed above, the Consumer Advocates submit that the FCC's designation of wireline broadband Internet access as an information service is without basis, illegal, and not in the public interest. Yet even under the FCC's view, when any service uses telecommunications then it must make a contribution toward the shared cost[60] of supplying the telecommunications.[61] The question remains, then, how should that contribution be determined?

5.1 The Allocation Of Shared Telephony Costs Proposed By The Consumer Advocates Ensures That Incremental Costs Are Covered, And That Costs Are Efficiently Allocated Based On Sound Economic Principles And Competitive Market Prices

58. 47 U.S.C. §254(k).

59. According to the FCC, wireline broadband Internet access does not make use of telecommunications services, which require the offering of telecommunications directly to the public for a fee (see, for example, Paragraph 19 of the Broadband NPRM which also defines telecommunications). The Consumer Advocates believe that the FCC is wrong in its conclusion.

60. Costs are shared or joint between products or consumers if the cost is incurred when any one of those products or consumers is supplied. Therefore, the cost cannot be attributed to any single product or consumer. Here, "shared" and "joint" costs are used interchangeably.

61. 47 U.S.C. §254(k); Broadband NPRM at ¶83.

Any cost allocation implies a cost-recovering price. To be sensible, such prices must be viable. Since the market for broadband services is subject to competition, the implied cost-recovering prices for broadband transmission[62] should reflect market forces. If prices for broadband transmission do not reflect market forces, then shared costs could be over-allocated to voice service, making cost recovery on broadband transmission impossible -- or shared costs could be under allocated and competitive broadband services, as supplied by the regulated firm, could be subsidized not providing sufficient compensation for the use of the telecommunications network. The Consumer Advocates therefore propose to use market prices observed for services equivalent to wireline broadband services (i.e., high-speed services provided by cable and other technologies) to determine the costs that should be recovered from broadband services over the telecommunications network. The result of this approach, as shown here, is that approximately one half of the average local loop economic cost is covered by the contribution from broadband – with variations according to costs in different geographic locations.

Specifically, the Consumer Advocates recommend that the allocation of shared telephony costs on a wireline telephone network attributed to broadband Internet access services should be equal to:

- the lowest wholesale price of broadband transmission services, implied or observed, as supplied by facility-based competitors with non-wireline telephony network infrastructure, hereafter called "independent suppliers,"[63]

less

- the wireline telephone company's incremental cost of broadband transmission (that is, the incremental cost of the telecommunications used in delivery of wholesale broadband Internet access service).

The revenue that the wireline carrier collects for broadband transmission must at least cover its incremental cost. What is left is allocated to shared costs, as illustrated in the following numerical example:

62. See supra note 57.

63. AOL-TimeWarner, when it uses its HFC cable network to supply broadband Internet access, is an example of an independent supplier.

> Assume the lowest non-wireline wholesale broadband transmission price in a particular area is $25.97/month/subscriber.[64] If the local regulated wireline supplier's incremental cost in supplying broadband transmission is $16.32 for DSL service, then the cost allocation of shared costs would be $9.65 (= $25.97 – $16.32).

A summary of the Consumer Advocates' reasoning in reaching this recommendation follows.[65]

In general, many cost allocations are efficient – i.e., any allocation that does not violate the incremental cost floor and the stand-alone cost ceiling criteria[66] (See Appendix 1 and Footnote 65). However, when the market for one of the services is competitive due to the presence of independent suppliers, then only one cost allocation is consistent with equal treatment of the regulated firm and its unregulated competitors. That allocation does not force the regulated firm to bear a greater cost than its independent rivals (which would violate the stand-alone cost ceiling), and equally does not provide it the means to subsidize, from its regulated services, entry into the competitive market (which would be anti-competitive).

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64. The numbers used here are based on actual data (for discussion see the more detailed example in Section 5.2).

65. Our detailed argument, based on four uncontroversial criteria, is presented in Appendix 1. The four criteria are the (i) Incremental Cost Floor Criterion (price of broadband transmission should cover incremental cost), the (ii) Demand-Based Shared Cost Recovery Criterion (shared costs should be recovered through a contribution from purchases of the various shared products), (iii) the Stand-Alone Cost Ceiling Criterion (implied cost-covering price of broadband transmission service should not exceed what broadband Internet access service providers would be willing to pay if they were allowed to pursue their own self-interest), and the (iv) Competitive Benchmark Criterion (prices should not be less than the price of the broadband transmission service purchased from independent suppliers).

66. Gerald Faulhaber, Cross-Subsidization: Pricing in Public Enterprise, American Economic Review, December 1975, pp.966-77.

The wholesale broadband transmission price, less the incremental cost of broadband transmission, places a cap on the largest cost allocation possible consistent with cost recovery.[67] Any cost allocation above this amount could not be recovered, since the market would not support the required price.

Equally, any cost allocation that does not support the price charged by independent suppliers of transmission would allow wireline firms to behave anti-competitively. They could anti-competitively subsidize entry into broadband transmission or broadband Internet access services markets by shifting profit earned from voice telephony into the broadband markets. To prevent such cross-subsidization a minimum cost allocation from broadband transmission must be assigned, and it must be no less than the lowest wholesale price for broadband transmission from an independent supplier minus the incremental cost of broadband transmission.

The application of the maximum and minimum cost allocations just outlined defines a particular allocation of shared costs to broadband transmission – the market price less incremental costs. This allocation lies between the incremental cost floor and the stand-alone cost ceiling, meets the statutory requirement for allocation of costs, and is consistent with economic logic.

Finally, the necessary price data for arriving at the cost allocations above can be obtained by relying on an "incentive-compatible mechanism" that provides proper incentives for the competing suppliers to provide the required information (Section 7.1). The incremental cost data would come from the ILECs, and would be audited by the FCC (Section 7.1). In fact, some of this data already exists (Section 8).

5.2 An Example of the Proper Cost Allocation -- The Wholesale Transmission Price Less Incremental Cost

67. The incremental cost is subtracted because efficiency requires that the price at least recovers the incremental cost of the service purchased, and because both efficiency and fairness require that, subject to competitive constraints, the agent incurring these costs be compensated for them.

It will be helpful to illustrate the approach of the Consumer Advocates by providing more detail to the earlier example.

The Consumer Advocates obtained several estimates of the wholesale price of broadband transmission. For example, Business Week reported that 65% of the retail price for broadband Internet service is kept by the transmission provider.[68] This corresponds closely with other publicly available data points.[69] Using current retail prices, this corresponds to a non-wireline wholesale broadband transmission price of $25.97/month/subscriber. If the wireline firm's incremental cost in supplying broadband transmission is $16.32,[70] then the cost allocation would be $9.65 (= $25.97 – $16.32). While this allocation toward shared costs is only an estimate, it is based on a range of available data and is indicative of the kind of contribution broadband transmission would make under the proposed approach.

The implied cost allocation should be applied toward the cable and wire accounts. That is, the cost contribution from broadband would be deducted from the cable and wire accounts; with the residual to be recovered by other services. This is extremely important. The contribution to shared costs from broadband must result in an equivalent reduction in shared cost contributions elsewhere. On average, over the US, the total amount in these two accounts amounts to about $18/month.[71] As a result, the implied contribution amounts to one half of the relevant shared economic cost of the local loop.

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68. See infra Table 1, note (e).

69. In Table 1, see rows (f), (i) and (l), and note the average of rows (j) and (k); footnote 113 indicates why the other table entries may be misleading.

70. $16.32 = $17.32 - $1.00: $17.32 is the incremental cost US West reported for the provision of DSL access (no ISP services) in at least in some locations. We have deducted one dollar from this amount to approximate the cost difference between retailing and wholesaling this service. Washington Utilities and Transportation Commission, In the Matter of the Costing and Pricing of Unbundled Network Elements and Transport and Termination, Transcript Volume V, August 22, 2000, Docket No. UT-003013.

71. FCC HCPM.

It is not always the case that independent suppliers offer wholesale broadband transmission on a commercial basis. However, in these cases alternative approaches can be used to approximate the market price of wholesale broadband transmission. Detailed discussion and examples can be found in Appendix 2.

5.3 The Network Is Increasingly Characterized By Shared Costs -- Requiring That Cost Allocations Be Based on Market Forces

Before moving to a more detailed discussion of the Consumer Advocates' position on cost allocation, it is useful to provide a more generic discussion of shared costs. In telecommunications, the problem of developing cost measurements that will appropriately reflect cost causation is particularly difficult because a high proportion of network costs is incurred in the process of providing multiple services – i.e., there are shared costs.

Once the costs of a shared input are measured, an allocation must be made across the services that use the shared input. If the services remain in the regulated part of the company, then it is necessary to devise a new separations category for these investment and associated expenses.[72] Alternatively, if the Commission insists on declaring the data services as information services, then it must revise Part 64 so that reductions in the cable and wire accounts flow directly into reductions in Part 36 loop allocations. Independent of the Commission's decision on the proper treatment of the services, however, when data services also use the local loop, a new cost allocation is required. In the case at hand, the Consumer Advocates recommend that the share attributed to broadband transmission be determined by reference to market prices. The relevant share calculated in this way is then subtracted from the shared cost pool and the

72. In order to complete the task of developing the new category we urge the Commission to immediately direct the Federal and State Joint – Board on Separations to address this issue. In the Separations Freeze Order , the Commission indicated that the Joint-Board should review this issue prior to the end of the freeze. We argue that now is the time to address the issue. In the Matter of Jurisdictional Separations and the Referral to the Federal-State Joint Board, CC Docket No. 80-286, FCC 01-162, released May 22 2001, paras. 31-33.

remaining shared costs should again be allocated among the remaining services that use the local loop just as before.

A more complete discussion of shared product pricing is provided in Section 5.4, but our main point is that the universal service support requirement under Section 254 (k) can only be properly met through proper allocation of shared costs that mimic competitive pricing. As the network evolves into primarily a service platform for broadband products such as high-speed data and video services,[73] the case for cost allocation will become even more compelling.

5.4 The Shared Provision Of Information And Telecommunications Services Over The Telecommunications Network Leads To Shared Costs Which Must Necessarily Be Allocated For The Information Services

The local loop is essentially a kiosk that is used to give customers' access to the network. Access is not a service;[74] rather it is an input to the production of telecommunication and information services – including advanced data services. Although the cost of the loop can be measured, there is no product (i.e., access) which is a separable service. Rather the loop is an input used to provide a number of services. Subscribers use the dial tone line for toll, local exchange, and vertical services (e.g. call waiting), in addition to broadband services that enable high-speed transmission of data and video.

73. See e.g., the Commission's discussion of telephone companies using VDSL technology to provide video programming. In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, January 14, 2002, FCC 01-389, ¶103.

74. "The defining characteristic of a service is that it is or would be demanded in its own right." Alfred Kahn and William Shew, Current Issues in Telecommunications Regulation Pricing, Yale Journal on Regulation 200, 201 (1987). Jerry Hausman, testifying on behalf of Pacific Bell, correctly stated that "nobody would buy a local loop just because it's a local loop." In the Matter of Alternative Regulatory Framework for Local Exchange Carriers, California PUC 87-11-033, March 13, 1992, transcript page 19126.

The cost of the loop is a fixed cost shared between voice and non-voice services such as data and video provided over the loop.[75] The costs are shared costs since the voice portion of the loop and the high-frequency portion of the loop are provided together, just as local and long distance calls are shared products that use the local loop and cotton fiber and cottonseed oil are shared products of cotton.[76] For this reason it is more economical to provide both voice and non-voice services on the same loop. The cost of the loop is therefore a shared cost attributable to access to voice services and access to data, and prospectively, video services.

Therefore, since the loop is used to provide many different products, its costs should not be considered as exclusively exchange service costs. Instead, the loop is a facility with costs that should be recovered from the different services that share the facilities. As noted by the Commission, in a competitive world, suppliers would recover the cost of the loop from all services that use the shared facility.[77] The proportion of the shared cost of the loop recovered from different services should reflect, in the ideal world, customers' demand for the jointly produced services that use the loop.

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75. See e.g.,Testimony of Dr. William E. Taylor before the New Mexico Public Regulation Commission In the Matter of the Identification of all Subsidies in the Existing Utility, Case No. 3325, Rates of Qwest Corporation Pursuant to HB 400, October 4, 2000, NMPRC Case No. 3325. According to Taylor, the cost of the loop is a shared cost between voice access to the network and the high-frequency spectrum UNE used for data services. See also Comments of the National Association of State Utility Consumer Advocates (NASUCA). In the Matter of Cost Review Proceeding for Residential and Single-Line Business Subscriber Line Charge (SLC) Caps, Access Charge Reform, Price Cap Performance Review for Exchange Carrier Federal-State Joint Board on Universal Local Service, CC Docket Nos. 96-262, 94-1, 96-45, January 24, 2002.

76. "That is, once acquired for use in producing one good, they are costlessly available for use in the production of others." John C. Panzar, Technological Determinants of Firm and Industry Structure in Handbook of Industrial Organization, vol. I, Eds. Richard Schmalensee and Robert Willig (Elsevier Science Publishing, 1989), Page 17.

77. In the Matter of GTE Telephone Operating Cos. GTOC Tariff No. 1 GTOC Transmittal No. 1148, CC Docket No. 98-79, October 30, 1998,
¶31.

However, regulated services fundamentally face less competition, and thus, absent regulation, wireline service providers could price and otherwise operate as almost unconstrained monopolists. Therefore, cost recovery for regulated services based solely on the demand for the jointly produced services would be counter-productive, since it would imply that the regulator sanctions monopoly prices. Broadband services generally face a higher degree of competition -- while price might not be set at competitive levels, it certainly is constrained by competition. Indeed, if a cost-allocation is made that is less than the wholesale price less the direct incremental cost, then the regulated firm could undercut competitive rivals merely because of this under-allocation, thereby harming competition.

The Consumer Advocates have not estimated the demand for the jointly produced services for the various shared services, but rather rely on market observations and empirical evidence to provide a benchmark for decision-making. In Section 8 we provide empirical evidence concerning the proper allocation of costs between information and telecommunication services.

5.5 The Network Is Increasingly Being Designed To Provide Multiple Forms Of Advanced Services, And This Will Increase The Need For Proper Allocation Of Shared Costs

The FCC has duly noted that the network is increasingly being designed to provide advanced services.[78] Moreover, a network designed to provide advanced services is fundamentally different from a network used to provide only basic voice services. The network is different not only in terms of the types and quality of services it provides, but also in the engineering design of the network. This has important and related cost and price implications.

Advanced telecommunications services increase the cost of network design and construction because advanced communications have more stringent technical requirements than voice communications. A significant factor limiting the provision of both voice and advanced service technologies, such as xDSL, is the length of the loop. That is, both forms of

78. Broadband NPRM at ¶¶7, 12.

communication degrade as transmission length increases. Traditional networks designed to carry voice service overcome distance sensitive signal attenuation by installing load coils at specific intervals to amplify voice signals.

While this resolution provided a cost-effective way to provide voice services, load coils have been found to prevent the provision of advanced services. To overcome the distance-related problems of providing advanced telecommunications services, network engineers must employ more expensive solutions. As a result, newer networks utilize more fiber optic cable and position the electronics necessary for advanced services closer to individual customer locations.[79]

Telephone companies are in the process of replacing their copper cables with fiber optics, and new technology is being developed and installed so that telephone companies will be in a better position to provide data and video services. While these facilities will also be used to provide voice service, the new services are the cost driver for these network upgrades, and this begs the question as to why voice services should pay for network upgrades that are not required to provide voice services. These observations are consistent with many of the observations noted by the FCC in the NPRM issued for this proceeding,[80] and therefore the Consumer Advocates submit that any sensible cost allocation must share the cost between voice and data services since data services are driving the costs. Clearly, the ILECs are expecting incremental revenue from data services -- if they did not, they would not be making these expenditures to provide data services. Ultimately, it would be bad economics and bad public policy to not have the cost-causing service pay for some of the cost of the upgrades to the network.

5.6 Any Cost Allocation From Broadband Transmission Must Commensurately Reduce The Cost Contributions From Some Other Products

As noted above, if the Commission determines that data services should remain in the regulated portion of the company, then it will be necessary to establish a new separations

79. See e.g., Broadband NPRM at ¶12.

80. See Broadband NPRM ¶¶7, 12 (discussing reengineering of the network).

category to contain the investment and expenses related to data services. Establishing this new category will reduce the cost of the common line basket. This reduction should lead to an immediate reduction of the residential, single-line business, multi-line business subscriber line charges. The residential and single line business subscriber lines charges are based on the economic cost of providing service. Removal of cost to another category will reduce the cost of service associated with these charges. The multi-line business subscriber line charge recovers not only economic cost but also some legacy costs. To extent that the multi-line business subscriber line charge recovers economic cost, then that charge should also be reduced. On the other hand, the multi-line business PICC is designed to recover allowed revenues that are not associated with economic cost. These include the legacy costs associated with the interconnection charge, marketing costs, and embedded costs that are greater than economic costs. Because the new category will contain only market driven economic costs, the shift of cost to the new category should not affect the multi-line business PICC.

The adjustments in the state jurisdiction depend on the individual state commission ratemaking authority. In a rate of return states, we expect that the shift of cost to the new category will lead to a reduction in rate base followed by a reduction in rates. In a price cap state, we expect that the shift in cost would be treated as an exogenous change reducing the price cap formula. However, at this time it is premature to determine how all of these changes will work out on the state level. As state public advocates, we are prepared to advise our respective state commissions concerning the best way to reduce rates.

If the Commission decides to designate data services as non-regulated services, then it will be necessary to allocate the costs to the non-regulated sector through Part 64. Because Part 64 allocates Part 32 accounts, it does not assign cost by loop categories. Therefore, it will be necessary to revise Part 64 so that the cost allocation to the non-regulated sector directly affects only the loop portions of the cable and wire accounts and the portions associated with inter-office transport and toll. This additional complication will add the specificity of the Part 36 rules to the Part 64 rules. It is necessary in order to achieve the purpose of ensuring that voice grade services do not subsidize the non-regulated data services.

6 The Consumer Advocates' Recommendations Are Consistent With The Four Principles And Policy Goals Outlined By The Federal Communications Commission In The Broadband NPRM

The four principles outlined in the NPRM are that:[81]

1. The Commission will "encourage the ubiquitous availability of broadband to all Americans";

2. "[T]he Commission's regulatory framework will conceptualize broadband broadly to include any and all platforms capable of fusing communications power, computing power, high-bandwidth intensive content, and access to the Internet";

3. "[B]roadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market" … and the Commission will strive "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal and State regulation" … the Commission will also be "ready to act against anticompetitive risks and discriminatory provisioning by dominant providers that result in consumer harm"; and

4. "The Commission will strive to develop an analytical framework that is consistent, to the extent possible, across multiple platforms" … and will take "a functional approach, focusing on the nature of the service provided to consumers, rather than one that focuses on the technical attributes of the underlying architecture."

The Consumer Advocates' approach is consistent with these principles because it:

- is based on how price is set in effectively competitive markets sending market-based investment signals (meeting the Commission's first and third principles);

- is competitively-neutral vis-à-vis horizontal competition (i.e., independent suppliers of broadband transmission services), thereby meeting aspects of the Commission's second, third, and fourth principles;

- seamlessly applies even if the wireline company provides upstream transmission services to suppliers of broadband Internet access services such as Earthlink, and in that circumstance is also competitively-neutral with respect to vertical competition (i.e., downstream broadband Internet access service providers which purchase broadband transmission from the vertically integrated wireline company), thereby meeting the Commission's third and fourth principles;

81. Broadband NPRM at ¶¶3, 4, 5, 6, 7.

- is consistent with setting prices that lie between the incremental cost floor and a stand-alone cost ceiling; and

- relies on feasible information requirements (e.g., market price data – the provision of which can be made incentive-compatible – and the incremental cost of broadband transmission by wireline firms).

7 IMPLEMENTATION OF A PROPER COST ALLOCATION MECHANISM

Before turning to some current empirical evidence regarding the competitively determined shared costs, it is useful to both discuss the data collection requirements associated with the Consumer Advocates proposal, and to review the FCC's approach to shared cost allocation in the past.

7.1 Incremental Cost Data Can Be Supplied By The Wireline Telecommunications Carriers, While Broadband Transmission Price Data Can Be Provided In An Incentive-Compatible Manner By The Affected Wireline Telecommunications Carriers And Audited By Independent Suppliers

The approach recommended by the Consumer Advocates requires a certain amount of data collection. The necessary data falls into two categories: (1) incremental cost data and (2) price data for wholesale broadband transmission, or, where wholesale broadband transmission is unavailable, price data for retail broadband Internet access services. These are each discussed in turn.

Incremental cost data, in the first instance, must come from the wireline telecommunications firms. The Companies already provide this data when they submit their tariff material.[82] Ideally, such data should be audited, though it could be used as an interim measure. The cost of auditing incremental cost estimates will be reduced to the extent that yardstick comparisons can be made across the different submitting firms. Yardstick comparison is also possible since substantial variation in broadband incremental costs is unlikely to occur

82. Pursuant to Section 61.38 of the Commission's Rules, local exchange carriers are required to support their proposed rates for new services, or revised rates for existing services, by filing a projection of costs for a representative 12-month period.

across comparable geographical regions (for example, downtown areas or suburban neighborhoods or rural districts or remote regions). There is no reason to believe wireline firms have differential access to technology or relative input prices vary significantly across similar geographic regions. Yardstick comparison also reduces the carriers' ability to mislead as it allows comparison between regions.

In the case of broadband transmission prices, the information burden will be greatly eased by relying on those parties directly impacted by the proposed allocation – i.e., the collection of data on prices can be done in a way that gives the companies an incentive to report the information fully and accurately, and with full public disclosure.

The Consumer Advocates recommend that the regulated wireline telecommunications firms report their estimates of the lowest third party price of broadband access in any given region (as outlined in Section 5.2 and Appendix 2). These reported prices, which the telecommunications firm would identify from public sources, would be passed on to the relevant independent suppliers in the regions for which the prices applied, at a minimum being sent to the broadband supplier whose prices are quoted. The independent suppliers would then have the opportunity to refute the quoted prices. If an independent supplier wishes to dispute the wireline telecommunication supplier's estimates, it must first demonstrate that the lower rate quoted by the wireline firm was either not available, or is misleading in some relevant respect. Further, the objecting independent supplier must provide the FCC with hard evidence of a published tariff or broadly used contracts at a higher rate. This aspect of the independent supplier's evidence is critical. The independent supplier's claimed tariffs must be verified by contracts or published tariffs, otherwise the wireline telecommunications firm's price is accepted.

What is proposed is incentive compatible (i.e., provides appropriate incentives to the market participants) because a system of checks and balances would exist for wireline carriers and independent suppliers of broadband transmission. On one hand, the effected telecommunications wireline carrier has an incentive to under-represent the actual or implicit price of its rivals for the supply of broadband transmission. The lower the price accepted by the FCC, the lower the shared cost allocated to broadband transmission and the higher the amount

the firm can recover from regulated services (i.e., still largely monopoly services). Further, if actual prices are higher than the price provided to, and used by, the regulator, the carrier can, at the retail level, either take profits or profitably claim market share at its rivals' expense.

On the other hand, the wireline firm's independent rivals in the provision of broadband transmission have strong incentives to correct any under-estimates. If the regulator accepts reported prices below the level of independent suppliers' actual prices, then the independent suppliers may be forced to lower their prices (at best foregoing profit, at worst being driven out of business) or lose market share to the wireline firms.

The incentive effect also covers geographical price variation. The wireline telecommunications carrier will be keen to identify price variation across different geographical regions. However, the actually degree of discrimination chosen would be up to the wireline provider. Independent suppliers may, in turn, present evidence that the wireline-supplied prices were not applicable or misleading, and confirm actual price levels through published tariff or contractual evidence. Of course, the independent rival must demonstrate the price of broadband transmission for servicing any group of customers uniformly occurs at higher levels than those claimed by the wireline firm. As a result, both the wireline firm and the independent broadband supplier have an incentive to examine quoted prices by geographical area, allowing relatively fine discrimination of price variation and all generated by the interested parties.

Rates established in this manner should be reviewed annually, or at the request of either party on the submission of substantive evidence that earlier rates were incorrect or have been made invalid by changing events. Again, the parties face strong incentives to monitor rates and seek correction as the need arises. Indeed, any errors made in the process are likely to be brought to the relevant parties' attention by market forces. For example, consider the case where the broadband transmission price in a region is determined on the basis of a relatively highly priced service, but an alternative independent carrier subsequently begins to supply service at a considerably lower rate. Competitively supplied retail rates would begin to fall, and the wireline firm would expect or possibly observe a loss in market share at its current retail prices. However, it would not have the capacity to recover its costs if it matched the price cut.

Therefore, it has a strong incentive to report the change of circumstances seeking a change in cost allocation based on the new prices.

Rate increases, however, would have to be responded to with a degree of caution. An independent supplier seeking to demonstrate that price has risen in the market would have to present substantive evidence of an increase in underlying costs, otherwise the regulatory approach could be used to effect monopoly prices. The risk is that since the cost-covering price for the wireline firm is determined by its rivals' prices, independent suppliers could try to manipulate the regulator to raise price. The most obvious example would arise where only one independent supplier exists. That supplier could raise price, and notify the regulator of the same. If the regulator responded by making the corresponding increase in the cost allocation from broadband transmission, the wireline firm would be induced to increase its own prices. While this would benefit consumers of Title II telecommunications services, it would also be using the regulator to effect monopoly prices in a market that previously had some degree of competition.

7.2 The Commission Should Allocate To Broadband Transmission A Share Of Costs Based On The Lowest Price Set By An Independent Supplier Less The Incremental Cost Of Broadband Transmission

In the past, the FCC has considered a fixed allocation factor that would split the cost of loop plant between regulated and non-regulated activities.[83] The Consumer Advocates believe that this may be an acceptable alternative, but, rather than arbitrarily establish a fixed factor, it would be more fruitful to consider developing a cost allocation factor as proposed earlier by the Consumer Advocates. Pricing policy can be consistent and efficient under our preferred approach, and at the same time can satisfy the requirement of Section 254 (k).[84]

83. In The Matter Of Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services, CC Docket No. 96-112, Notice of Proposed Rulemaking, FCC No. 96-214, Adopted May 10, 1996; Released: May 10, 1996. at ¶37-42. ("Video Notice").

84. Consumer Advocates reserve the opportunity to advocate other forms of cost allocation alternatives in other proceedings depending upon the applicable service.

The Broadband NPRM states:

> Specifically, we invite commenters to address the general sufficiency of our existing allocation rules and policies in a broadband environment and whether those rules should be modified in order to meet the requirements of section 254(k).[85]

Six years ago, the 1996 Telecommunications Act removed many of the restrictions barring LECs from offering competitive and non-traditional telecommunications services. The FCC said soon after that "virtually all incumbent local exchange carriers' outside plant is dedicated and assigned to regulated activities by direct assignment".[86] Moreover, the FCC recognized that it had to address "how to allocate common costs between the non-regulated offerings that will be introduced by incumbent local exchange carriers and the regulated services they already offer (because) our current cost allocation rules were not designed for this task."[87]

Furthermore, the FCC was quick to point out that the local loop presented the greatest problem:

> For the non-regulated offerings contemplated in this proceeding, loop plant presents the greatest problem. Direct assignment is generally not available because loops capable of providing both regulated and non-regulated services generate common costs. Because loop plant is primarily traffic insensitive, the usage-based allocation process prescribed by our Part 64 rules does not result in cost-causative allocations.[88]

The cost allocation rules are now antiquated, fail to reflect the way in which telecommunications plant is utilized, do not ensure that supported services are not subsidizing non-supported services, and do not ensure that non-competitive services are not subsidizing services subject to competition.

85. Broadband NPRM at ¶83.

86. Video Notice at ¶18.

87. Id. at ¶2.

88. Id. at ¶19.

In the past, the Commission found that a fixed allocation would ensure just and reasonable rates[89] that do not result in the cross subsidization of competitive services by services that are not subject to competition.[90] Because the FCC also felt that a cost causative allocation was not likely to achieve a reasonable degree of accuracy for shared facilities it was determined that the allocation should "…be based on other considerations such as demand or public policy considerations."[91]

In this instance, Consumer Advocates suggest that the preferred alternative would not be a fixed allocator. As the FCC earlier explained with regard to a 50/50 fixed allocator:

> that would split the cost of loop plant equally between regulated and nonregulated activities… A fixed factor has the advantage of simplicity, and would eliminate the need for usage projections and measurements as well as subsequent reallocations to adjust for inaccurate projections.[92]
>
> We tentatively conclude that we should prescribe a fixed factor for allocating loop plant common costs between regulated and nonregulated activities. We reach this tentative conclusion because it appears that usage-based allocations for loop plant would preclude our achieving the best possible balance of goals and objectives.[93]

The Consumer Advocates recognize the inherent simplicity of a fixed allocation, but recommend a market-based approach to cost allocation instead of fixed allocation factors in this proceeding for several reasons. First, it is known that the resultant cost-covering prices are sustainable under a market-based approach (i.e., consumers will purchase output at those prices) because the broadband prices come from actual markets and the implied Title II prices are actually lower than existing Title II prices. Second, the implied cost-covering prices are market-oriented and therefore flexible, and third, the cost-allocation discourages anti-competitive

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89. Video Notice at ¶22.

90. Id.

91. Id. at ¶41.

92. Id. at ¶39.

93. Id. at ¶40.

subsidization from the rate base to competitive services. Under fixed allocation factors, none of these benefits is guaranteed.

7.3 Price Caps for Telecommunications Regulation Do Not Provide Adequate Protection To Consumers, And Cannot Justify Any Policy Decision Which Does Not Properly Allocate Shared Costs, And The Commission Has Previously Applied Cost Allocation Rules To Companies That Were Also Governed By Price Caps

It is necessary to adopt a cost allocation mechanism, first and foremost, because of the statutory requirement of 254(k). Furthermore, the existing regulatory mechanisms do not provide sufficient protection to subscribers of monopoly voice telecommunications services. At the Federal jurisdiction, price caps have been used to control prices for a number of years. As described below, however, the Commission has long recognized that price caps, while they may reduce the likelihood of cross-subsidization of competitive services, do not eliminate this possibility. Furthermore, many States continue to rely on rate-base regulation, and in these jurisdictions, it is especially important for the Commission to implement the protection mandated by 254(k).[94]

In the past, the Commission applied cost allocation and separate accounting rules to price cap regulated companies because the price caps by themselves did not provide adequate protection to users of Plain Old Telephone Service (POTS). The FCC concluded in its Video Dialtone Reconsideration Order that "…the basic video dialtone offerings of LECs would be subject to the existing price cap rules".[95] In reaching this conclusion, the FCC decided that video dialtone constituted a new service under the price cap rules because it would add to the range of options available to customers. Consistent with the Commission's new services rules, LECs

94. Fourteen states relied on rate base regulation in 2000. State Telephone Regulation Report White Paper, Vol. 18 at 20-22.

95. In the Matter of Price Cap Performance Review for Local Exchange Carriers; Treatment of Video Dialtone Services Under Price Cap Regulation, CC Docket No. 94-1, Second Report And Order And Third Further Notice Of Proposed Rulemaking, FCC 95-394, Adopted: September 14, 1995, Released: September 21, 1995, at ¶4.

were obligated to "…craft their video dialtone rates to cover the 'direct costs' associated with providing the service."[96]

In response to the NPRM on allocation of costs with provision of video service, some (e.g., Bell Atlantic) argued that pure price caps would eliminate the need for cost allocation requirements as a safeguard against cross subsidies.[97] However, the FCC initiated that rulemaking procedure well aware that many of the ILECs were operating under price cap regulation. More importantly, Congress most certainly did not agree with Bell Atlantic -- price caps were in effect when it passed section 254(k). Furthermore, in a later Report and Order, the FCC found that:

> …our current system of interstate price cap regulation does not eliminate the need for cost allocation rules. Moreover, because these incumbent local exchange carriers' intrastate services may be subject to cost-of-service regulation or to a form of price cap regulation that involves potential sharing obligations or periodic earnings reviews, the incumbent local exchange carriers may still have an incentive to assign a disproportionate share of costs to regulated accounts.[98]

7.4 The Proper Allocation Of Costs Requires That Not All Costs Are Imposed On Those Services That Are Included In The Definition Of Universal Service

As demonstrated above, the FCC has fully recognized the need to apportion loop costs among all services, rather than impose 100% of them on the "services included in the definition of universal service."[99]

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96. Id.

97. See e.g., Bell Atlantic Comments, In the Matter of Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services, CC Docket No. 96-112, May 31, 1996, at Paragraphs1-6.

98. In the Matter of Implementation of the Telecommunications Act of 1996: Accounting Safeguards Under the Telecommunications Act of 1996, CC Docket No. 96-150, Report and Order, FCC 96-490, Adopted: December 23, 1996, Released: December 24, 1996, at ¶271.

99. 47 U.S.C. § 254(k).

Although Section 254(k) does not prescribe an exact figure or formula for the apportionment of costs between services supported by universal service and other non-supported services, it does require some reasonable Commission assessment of the relative costs of providing those services and a rational apportionment of those costs. Therefore, we concur with the tentative conclusion of the FCC that section 254(k) requires an allocation of costs to broadband services since the network is being designed to provide services that are not included in the definition of universal service.[100]

The Commission approached this position when it tentatively concluded that it "…should prescribe a fixed factor for allocating loop plant common costs between regulated and nonregulated activities."[101] This tentative conclusion was reached because the FCC felt that a cost causative allocation was not possible. That being the case, it was determined that the allocation should "…be based on other considerations such as demand or public policy considerations."[102]

The Consumer Advocates' proposed method for the apportionment of costs between the services supported by universal service and those not so supported is clearly more rational than, for example, one that imposes an increased end user charge as the sole method of loop cost recovery. The imposition of 100% of all loop costs on one group of essential voice services cannot be deemed reasonable. This is especially the case at the present, and will become even more so in the future as technological advances continue to expand the variety of services that carriers are actually providing, and consider providing, over the local loop. The need to assign costs to all services using the loop will become more important as the ILECs' engineer their networks more and more towards the next generation converged network offering "…a single network infrastructure for delivering integrated voice/data services."[103]

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100. Broadband NPRM at ¶¶7, 83; Video Notice at ¶2.

101. Video Notice at ¶40.

102. Id. at ¶41.

103. DSL Anywhere: A Paper Designed To Provide Options For Service Providers To Extend The Reach Of DSL Into Previously Un-Served Areas, a DSL Forum Whitepaper submitted December 12, 2001 in the National Telecommunications and Information Docket No.

Furthermore, the recovery of all loop costs through a fixed subscriber charge would impose a rate structure on monopoly customers that is contrary to the method used by unregulated suppliers of telecommunications, broadband, and video services. Cable companies do not require customers to recover the full-cost of access before subscribing to any product. Rather, the cable companies recover the cost of access based on their customers' interest in using different products. For example, the costs of the recent cable platform network upgrades are not recovered from all customers. Rather, increased payments are obtained from the subscribers who value the additional channel capacity or cable modem service.[104]

The FCC recognized that section 254(k) empowers it to prevent supported services from paying too much of the shared costs. According to the CALLS Order, Section 254(k):

> places a continuing obligation on the Commission to ensure that the treatment of joint and common costs, such as corporate overheads, prescribed by our accounting, cost allocation, separations, and access charge rules will safeguard the availability of universal service.[105]

Finally, it should be pointed out that several ILECs have also provided estimates in the past of what they feel are a reasonable portion of costs to be allocated to advanced services. The ILECs' estimates are close to those of the Consumer Advocates. In their comments on this issue, the ILECs' suggestions as to the appropriate fixed factor for the allocation of loop plant shared costs

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011109273-1273-01, In the Matter of Request for Comments on the Deployment of Broadband Networks and Advanced Telecommunications, available at http://www.ntia.doc.gov/ntiahome/broadband/comments/DSLf/DSL_anywhere.pdf, at 7.

104. See e.g., the Commission's discussion of cable upgrades and the pricing practices of the firms. In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, January 14, 2002, FCC 01-389, ¶¶34-41, 180-83.

105. In the Matter of Access Charge Reform (CC Docket No. 96-262), Price Cap Performance Review for Local Exchange Carriers (CC Docket No. 94-1), Low-Volume Long-Distance Users (CC Docket No. 99-249), and Federal-State Joint Board On Universal Service (CC Docket No. 96-45). Sixth Report and Order In CC Docket Nos. 96-262 And 94-1, Report And Order in CC Docket No. 99-249, Eleventh Report and Order In CC Docket No. 96-45. Adopted: May 31, 2000, Released: May 31, 2000. Paragraph 96.

ranged from the 25-30% range proposed by Bell Atlantic, up to a factor of 50% proposed by the Southern New England Telephone Company (SNET).[106] Bell Atlantic's position is consistent with the view it adopted in the video dialtone proceedings -- once the loop plant is used to provide another service other than voice service, the loop plant should be treated as a shared facility and all of the cost not recovered in whole from any one service.[107]

7.5 The Consumer Advocates' Proposal To Allocate Costs Is Consistent With FCC Accounting Rules Which Govern The Transfer Of Assets

The Commission has rules that govern the transfer of assets between the regulated and non-regulated subsidiaries of an ILEC, and their implementation can be monitored through the Automated Reporting Management Information System (ARMIS). The rules in 47 CFR Part 32, which governs transactions with affiliates, stipulate that when the regulated firm sells an asset to the non-regulated entity, the price shall be the maximum of the book value and the market value.[108] The allocation of shared costs to broadband and other services under the Consumer

106. See Bell Atlantic Comments, In the Matter of Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services, CC Docket No. 96-112, May 31, 1996, at 10 and Comments of the Southern New England Telephone Company, In the Matter of Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services, CC Docket No. 96-112, May 31, 1996, at 12-13. It should be noted that in another video dialtone proceeding, Bell Atlantic's Witness, Dr. William E. Taylor, stated that: "Since the proposed network supports current and future services and lowers the cost of maintaining and provisioning current services, it would be economically incorrect to require that all costs of the upgraded network platform be recovered entirely from only one of the many new services that it will make available. Rather, the price of each service that uses the platform should be required to recover at least the incremental cost of the service and, together, revenue from all services that use the platform must recover the incremental cost of the platform. Just as multi-product firms in competitive markets recover common costs from all of the services they supply in proportions that depend on market conditions for the different services, the common cost of the network platform should be recovered from all services that use the platform." (Reply of Bell Atlantic; Exhibit A—Affidavit of William E. Taylor, Ph.D., Before the Federal Communications Commission, In the Matter of The Bell Atlantic Telephone Companies Tariff FCC No. 10, Video Dialtone Service, Transmittal No. 741, March 6, 1995, at 3-4) (Emphasis in original).

It should also be noted that SNET proposed that this 50% allocation be applied to divide the joint and common costs of the loop equally between telephony and broadband services.

107. Id.

Advocates proposal is consistent with this accounting methodology this method seeks to ensure that assets are not undervalued/underpriced in both regulated and unregulated activities.

7.6 State Regulatory Commissions Have Interpreted Shared Cost Pricing To Require A Non-Zero Price For Voice And Non-Voice Services

The FCC has determined that the high-frequency spectrum of the loop is an unbundled network element to which ILECs must provide CLEC access.[109] It is the responsibility of state commissions to determine the price of this UNE. This, in effect, makes it the state commissions' collective responsibility to allocate shared costs. Apart from the discussion below of the California case, we will not go into detail on this issue here, but instead refer to previous Comments submitted on the role of state commissions by NASUCA in the CALLS proceeding.[110]

Nevertheless, there are two points made in the earlier filing that merit emphasis. First, two major ILECs, SBC and Qwest, contended that it was appropriate to allocate 50% of the economic cost of the loop to the high-frequency portion of the unbundled loop. Second, a number of state consumer advocates have adopted the view, advocated by Qwest and SBC, that a portion of the shared cost of the loop should be recovered from the users of advanced telecommunications services.

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108. FCC Armis-Related Rules, 47 CFR Part 32.27: Uniform System of Accounts for Telecommunications Companies, Page 414. http://www.fcc.gov/wcb/armis/documents/PART32.PDF

109. In the Matters of Deployment of Wireline Service Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, 14 FCC Rcd 20912, 20926 (1999) ("Line Sharing Order") at ¶25.

110. Comments of the National Association of State Utility Consumer Advocates (NASUCA). In the Matter of Cost Review Proceeding for Residential and Single-Line Business Subscriber Line Charge (SLC) Caps, Access Charge Reform, Price Cap Performance Review for Exchange Carrier Federal-State Joint Board on Universal Local Service, CC Docket Nos. 96-262, 94-1, 96-45, January 24, 2002, Sections 7.2 and 7.3, Pages 74-80.

In California, the Public Utilities Commission, in an interim decision that analyzed the issue in great detail, also found that a zero cost for the portion of the loop used for high frequency transmission -- the high-frequency unbundled network element (HUNE) -- was unreasonable for the following reasons:

> 1. Taking into account the forward-looking cost of capital and economic depreciation, including a reasonable profit, it is presumptively unreasonable to find a just, reasonable, and nondiscriminatory interim rate for use of the high frequency portion of the loop to be zero;
>
> 2. Taking into account a reasonable allocation of shared costs, in the interim, including forward-looking common costs, it is presumptively unreasonable to find a just, reasonable, and nondiscriminatory interim rate for use of the high frequency portion of the loop to be zero; and
>
> 3. "ILECs are now devoting billions of dollars to initiate broadband service capable of meeting all of their customers' needs for not only voice, but also data, and other products and services. Even if ILECs allocated no direct costs in years past when they established price floors for their ADSL retail services, this does not necessarily make zero a correct TELRIC calculation today for data transport over the local loop in the year 2000 and beyond. That is, it is not unreasonable that TELRIC for the loop calculated today based on a system designed to serve all of a customer's needs, including data as well as voice, might include some costs (e.g., capital, profit, economic depreciation, shared) for services other than voice. In fact, if transport of data is the future of telecommunications, it may be that xDSL services on the high frequency portion of the local loop cause all future loop costs, and voice services cause none."[111]

The Consumer Advocates concur with the reasoning of the California PUC, and believe that the Commission in its evaluation of cost allocation issues must consider such reasoning.

111. Before the Public Utilities Commission of the State of California, In the Matter of Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks and Investigation on the Commission's Own Motion Into Open Access and Network Architecture Development of Dominant Carrier Networks, Interim Opinion, Decision 00-09-074, Rulemaking No. 93-04-003 and Investigation No. 93-04-002 (Interim Arbitration, Line Sharing Phase) September 21, 2000, at 16-18 (emphasis added). The Commission is currently in the process of establishing final UNE and HUNE rates in this proceeding; Rulemaking No. 93-04-003 and Investigation No. 93-04-002 (Interim Arbitration, Line Sharing Phase).

The Commission has requested comments on its cost allocation methods in this NPRM, and the Consumer Advocates believe the Commission can profit from looking at the experience of states such as California which have addressed the cost allocation issue in a reasonable manner.[112]

8 An Empirical Analysis Of The Pricing Of Broadband Transmission In Both Cable And Telecommunications

The Consumer Advocates have recommended that the cost allocation attributed to broadband transmission be set to the lowest, implied or actual, price of broadband transmission, as set by independent suppliers, less the incremental cost of supplying the same. Table 1 summarizes publicly available data on retail and transmission prices. The fourth column of Table 1 provides a range of estimates of the cost allocation that results from application of the recommendation of the Consumer Advocates. The cost allocation is the difference between the price of wholesale transmission (column 2) and the incremental cost of transmission (column 3). The table also lists the relevant retail price for broadband Internet service (column 5).

The table is intended to be indicative rather than definitive, and indeed, in some cases—see the notes to the table for known biases—the available data is flawed. The range of contributions toward loop costs in the table varies from about $3 to $33. However, a more careful examination of the data suggests a range of $9-$13 is more likely.[113] This conservatively comes close to about half the cost of a typical local loop.[114]

112. Broadband NPRM at ¶83.

113. The following contributions in the table are probably too low: on the current British Telecom contribution see (d); on the Excite@Home post-bankruptcy contribution see (g); the Qwest contribution at row (j) depends on one of several rates from Qwest. Taking an average would give a contribution closer to $9. The following contributions are probably too high: the AT&T-Excite@Home contribution at row (b) is based on prices that either have been long since superseded or are simply wrong (for example, compare with rows (e) and (f)); the British Telecom contribution (row (c)) likely represents the use of monopoly power; the Qwest contribution at row (k), when averaged across Qwest's broadband services, would be closer to $9; and the two cable company estimates, (m) and (n) were not verified as ever being offered and may be wishful thinking or represent public bargaining positions.

114. See supra note 71.

Table 1 – Wholesale Broadband Prices and Implied Cost Contributions

Case	Wholesale Price of Broadband Transmission ($/Month/ Customer)	Incremental Costs ($/Month/ Customer)	Broadband Cost Allocation ($/Month/ Customer)	Retail Price of Broadband Internet Service ($/Month/ Customer)
(1)	(2)	(3) (a)	(4) Column (2)-(3)	(5)
Broadband Transmission and Retail Prices Directly Available				
AT&T-Excite@Home (b)	$49.00	$16.32 (US West)	$32.68	$69.00
British Telecom Pre-April 2002 (c)	$36.23 (£25.00)	$16.32 (US West)	$19.91	$57.98 (£40.00)
British Telecom April 2002 (d)	$21.38 (£14.75)	$16.32 (US West)	$5.06	$43.48 (£30.00)
Excite@Home Pre-Bankruptcy (e)	$26.97	$16.32 (US West)	$9.65	$39.95
Excite@Home Pre-Bankruptcy (f)	$25.95	$16.32 (US West)	$9.63	$39.95
Excite@Home	$19.95	$16.32 (US West)	$3.63	$39.95

Case	Wholesale Price of Broadband Transmission ($/Month/ Customer)	Incremental Costs ($/Month/ Customer)	Broadband Cost Allocation ($/Month/ Customer)	Retail Price of Broadband Internet Service ($/Month/ Customer)
Wind down phase (g)				
Broadband Transmission Price Set to Margin Between Retail Price with ISP less Retail Price without ISP (h)				
BellSouth (Kentucky) (i)	$28.00	$16.32 (US West)	$11.68	Not available
Qwest-Microsoft (256 Kb/s up and down (j)	$20.60	$16.32 (US West)	$4.28	$39.95
Qwest-Microsoft (256Kb/s up 640 Kb/s down) (k)	$30.60	$16.32 (US West)	$14.28	$49.95
RCN (l)	$22.55	$16.32 (US West)	$6.23	$35
Cable Company Sources (Not Verified as Actual Prices)				
Cable Executives' Forecast (m)	$32.95	$16.32 (US West)	$16.63	$39.95
AOL-Earthlink (n)	>$30.00	$16.32 (US West)	>$13.68	$40.00

Notes to Table 1:

(a) The incremental cost of broadband transmission in the table ($16.32) is derived by subtracting an estimate of incremental retailing costs ($1) from the weighted average of US West retail prices for bare-bones 256 and 768 Kb/s services. The service provided was broadband access, but without some of

the functions typically supplied by an ISP. To the extent that the offering included services beyond plain broadband transmission, the $16.32 incremental cost estimate exaggerates the actual incremental cost of broadband transmission, and would understate the implied cost contribution of column (4). US West Communications, Transmittal Number 985, April 26, 1999, Tariff FCC No. 5, Access Service, Section 5, Part 69 Expense Ratios, Megabit Subscriber Service.

(b) "In the Way of Open Access", Network World Signature Series, Dec. 27, 1999, by David Rohde http://www.nwfusion.com/power99/power99-telecom.html.

(c) "BT to Unveil Cost Cuts and a New Focus". The Wall Street Journal, April 8, 2002. "Rivals to help BT's Growth in Broadband." By Robert Budden, Financial Times, April 5, 2002 (http://news.ft.com/ft/gx.cgi/ftc?pagename=View&c=Article&cid=FT3HJ78FOZC&live=; http://www.totaltele.com/view.asp?ArticleID=50761&Pub=tt; sighted 14 April 2002. Exchange rate at 9:28 am EST, 23 April 2002.

(d) British Telecom's rate changes were announced after a good deal of public breast-beating about broadband take-up in the U.K., and are likely the result of concerted political and regulatory pressure (see (c) for sources). This appears to be confirmed by an unusually rapid response by OFTEL, which approved the rates on March 28th (see www.oftel.gov.uk/press/releases/2002/pr16_02.htm; sighted 14 April 2002). British Telecom has indicated that it expects to lower the price of retail services to £27 (http://www.totaltele.com/vprint.asp?txtID=51391). The Consumer Advocates again believe these are politically rather than market-determined prices.

(e) Peter Elstrom, "Excite@Home: A Saga of Tears, Greed, and Ego", Business Week, December 17, 2001, Pages 94-99, estimates that 65% of the retail broadband Internet service price is kept by the transmission provider. The retail price in this row represents current levels.

(f) John M. Higgins, "A Silver Lining in Demise of Excite@Home", TV Insite: Broadcasting Cable, December 10, 2001. http://www.tvinsite.com/broadcastingcable/index.asp?layout=story_stocks&articleid=CA185651&display=Top+of+the+Week&title=A+silver+lining+i

n+demise+of+Excite%40Home&pubdate=12/10/2001, estimates $13-$15 must be paid to the retail ISP. The retail price in this row represents current levels.

(g) Excite@Home's broadband transmission rate post-bankruptcy is misleadingly low. Excite@Home used the threat of immediate closure and stranding of existing customers to negotiate good interim rates in return for allowing the cable companies which supplied the broadband transmission service time to set-up their own Internet access services. This enabled an orderly transfer of Excite@Home customers to the now vertically integrated cable companies. In contrast, when negotiations with AT&T Broadband failed, Excite@Home cut their customers off overnight. See (e) for sources.

(h) The broadband transmission price entries in this section of the table is the retail price of service that does not include standard ISP services less $1.00. The $1.00 has been subtracted as an estimate of retail billing costs. Where relevant, additional retailing costs, such as administering email address, web-space etc., should also be subtracted, but the data was not available. In those cases, the implied cost contribution in column (4) exaggerates the cost contribution to underlying transmission attributable to broadband transmission.

(i) $29 (= $28 + $1—see (h)) was the lowest rate on offer prior to it being overturned by the Commonwealth of Kentucky. The rate was only available to customers who guaranteed purchase from Bell South of 40,000 lines for 12 months. Commonwealth of Kentucky, Before the Public Service Commission, In the Matter of: Iglou Internet Services, Inc. vs. BellSouth Telecommunications, Inc., Case number 99-484, order, p. 12.

(j) In 2001, Qwest sold its ISP operations to Microsoft. Qwest continues to provide the telecommunications for the ISP operations of Microsoft in its 14-state region, but all retail ISP functions have been transferred to Microsoft. Qwest 256 Service without MSN Broadband is $21.95 (= $20.96 + $1—see (h)), and with MSN Broadband it is $39.95. http://www.qwest.com/residential/products/dsl/index.html.

(k) Qwest Deluxe Service without MSN Broadband is $31.95 (= $30.95 + $1—see (h)), and with MSN Broadband it is $49.95 -- for discussion and sources see (j).

(l) RCN's retail broadband transmission price of $23.55 (= $22.55 + $1.00 -- see (h)) is for nearly a complete retail offering, providing all the kinds of services expected, except perhaps a tailored home-page/information service http://www.rcn.com/cablemodem/). Retail prices obtained by calling RCN directly.

(m) The implied broadband transmission prices here probably are misleadingly high as presumably if the Cable executives quoted are right then retail prices would also fall. It is also not clear on what basis the cable executives' forecast was made. Most of the other evidence presented in this table does not correspond with this forecast. References as (e).

(n) The $30 appears to be the price AOL-Time Warner sought in contract negotiations and may not have been achieved. It also represents a minimum payment. The AOL-Time Warner offer apparently also demanded 75% of the retail price if this exceeded $30, advertising space at the top of the ISP's page and 25% of the ISP's advertising revenues. "ISPs to AOL Time Warner: You Call This Open Access?" Business Week Online Daily Briefing, September 29, 2000 (http://www.businessweek.com/bwdaily/dnflash/sep2000/nf20000929_701.htm).

9 Universal Service Funding Obligations Should Be Required Of All Providers Of Wireline Broadband Internet Access Services

9.1 Introduction

The FCC has held that wireline broadband services are interstate services.[115] Consumer Advocates understand that this jurisdictional determination is under appellate review. For the purpose of this discussion, Consumer Advocates will accept this jurisdictional determination. If wireline broadband services are interstate services, the Consumer Advocates agree with the FCC that telecommunications carriers providing broadband Internet access service have an existing obligation to provide universal service support contributions.[116] The Consumer Advocates would further assert that the FCC should not now waver in its support of universal service and should *continue* to require wireline broadband Internet service providers to contribute to universal service support, insofar as those services are found to be interstate services.[117] Consistent with the Consumer Advocates' earlier analysis, however, the universal service obligations should be looked at for each part of the bundled service: the wireline broadband service and the Internet access service.

Regarding universal service, the FCC stated within this NPRM that, as a policy matter, its commitment to its statutory objective of promoting and advancing universal service has not changed.[118] Consumer Advocates submit that the commitment to universal service requires the FCC to have wireline broadband Internet service providers to support universal service. Even if the FCC classifies wireline broadband Internet access service as an information service, that congressional requirement should direct the FCC to not exempt wireline broadband Internet

115. NPRM at ¶62, citing GTE Telephone Operating Cos., GTOC Tariff No. 1, GTE Transmittal No. 1148, CC Docket No. 98-79, Memorandum Opinion and Order, 13 FCC Rcd 22466 (1998).

116. NPRM at ¶72.

117. The issues of whether either or both wireline broadband or Internet access are interstate services has not been settled. The ensuing discussion accepts, arguendo, that both components are interstate services and are subject to assessment for USF contributions.

118. NPRM at ¶2.

access service from existing universal service support obligations.[119] If the FCC, as suggested here, reclassifies broadband services as an information service, the broadband component should bear funding obligations. Any broadband service provided over wireline facilities should also bear a universal service obligation, as discussed below.

Presently, the FCC requires wireline broadband Internet service providers to make universal service contributions on the "telecommunications service" component of the service.[120] This should continue. These comments, however, address the question of the universal service funding implications of defining wireline broadband Internet access service as an "information service". Even so, Consumer Advocates stress, as noted above, that we do not support such a reclassification, and in fact object to such a definition.

9.2 The FCC Has A Legal Basis To Require Providers Of Wireline Broadband Internet Access Service To Contribute To Universal Service Because TA-96 Specifically Enables The Commission To Assess Universal Service Contributions On Providers Of Interstate Telecommunications

Regardless of the definition of wireline broadband Internet access service, whether it is a telecommunications or information service, the FCC should require wireline broadband Internet service providers to contribute to universal service support. That conclusion is supported by the policy announced in section 254(b)(2) of TA-96 that specifically directs the FCC to base its universal service support and advancement policies on the principle that "[a]ccess to advanced telecommunications and information services should be provided in all regions of the nation".[121] Section 254(b)(3) further provides that consumers in rural, high-cost, and insular areas of our nation should have access to telecommunications and information services, including advanced information services, at rates that are comparable to similar services in urban areas. Those sections unequivocally indicate a congressional intent to provide consumers throughout the nation with access to both telecommunications and information services.

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119. NPRM at ¶77.

120. NPRM at ¶72.

121. 47 U.S.C. §254(b)(2) (emphasis added).

Within TA-96, Congress further directed that "[a]ny other provider of interstate *telecommunications* [other than telecommunications carriers] may be required to contribute to the preservation and advancement of universal service if the public interest so requires".[122] The Consumer Advocates assert that the public interest requires wireline broadband Internet service providers to make universal service support contributions. That requirement fits neatly within the congressionally – designed universal service support scheme. As indicated above, TA-96 defines "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."[123] This requirement is clearly met. Whether one considers the company to provide telecommunications service or information service, it is clear that what is being provided is telecommunications.

In these comments, the Consumer Advocates have discussed the distinction between telecommunications services and information services. The Consumer Advocates now discuss below the broader category of interstate "telecommunications", and show why broadband service is "telecommunications" of the type that must contribute to universal service.

As we have already stated, we accept here that wireline broadband Internet access service is an interstate service. Therefore, the first condition of the FCC's exercise of its permissive authority to require universal service support contributions from the Internet access portion of wireline broadband Internet access service is clearly met.

Next, TA-96 requires "telecommunications" to be conditioned on the transmission of information of the user's choosing between or among points specified by the user. It is the primary function of the wireline broadband Internet access service bundle to allow a user to communicate with web sites of the user's choosing, and using computer programs housed within

122. 47 U.S.C. §254(d).

123. 47 U.S.C. § 153(43).

the user's computer, to either download programming language from the host computer to the computer of the user, or to transmit programming language between those computers. Although users do interact with their service provider, it would be false to assume that those user-provider exchanges constitute a substantial portion of online user activity. On a practical level, wireline broadband access providers serve much the same function as telephone providers in that they switch and route Internet Protocol addresses per the requests of Internet users. Therefore, in the main, wireline broadband Internet service providers allow users to transmit information of the user's choosing between or among points specified by the user.

Next, the definition of "telecommunications" requires that communications occur without change in the form or content of the information as it is sent and received. When a subscriber is not interacting with the web-based content of the subscriber's wireline broadband Internet access provider, that subscriber is transmitting and receiving data in a form unchanged by the subscriber's wireline broadband Internet access provider. For example, a broadband Internet subscriber who points their web browser to the website www.fcc.gov will likely download the web-pages of the FCC into the user's computer without altering the form or substance of how those pages were posted by the FCC onto its server. Thus, that subscriber's wireline broadband Internet access provider does not alter or act on the web pages requested from the FCC; those pages arrive at the user's computer in the same form as when the FCC posted that content on its server. In fact, it makes no difference whether those web pages were downloaded through the conduit of a cable modem, a DSL line, or dial-up Internet access, the access provider merely serves as conduit through which the transfer of information between the subscriber and the content provider may occur.

Although wireline broadband Internet access providers may also engage in the provision of information services to their subscribers, that is not the extent of the activity of wireline broadband Internet access providers. Wireline broadband Internet access providers engage in the provision of telecommunications to their subscribers because it is the very nature of wireline broadband Internet access providers to provide high-speed access to the panoply of information available on the World Wide Web. Although wireline broadband Internet access providers do undeniably provide *some* information services to their clients, that is not the fundamental

purpose of their activity; the Consumer Advocates assert that, on the whole, wireline broadband Internet service access providers merely serve as a conduit for web-based data, and charge their subscribers a fee for doing so. Indeed, the FCC earlier tentatively concluded that it could exercise its permissive authority to require facilities-based Internet service providers to contribute to universal service "based upon their self-provisioning of telecommunications".[124] Therefore, the FCC should now also consider wireline broadband Internet access providers to engage in the provision of telecommunications, and thus be subject to the universal service contribution requirements.

In regard to assessing contribution on telecommunications that are bundled with other services, the FCC has already established adequate and workable mechanisms to address bundled service offerings. In this NPRM, the FCC referenced its contribution rules as developed in the CPE/Enhanced Service Bundling Order.[125] Therefore, the FCC stated that providers could contribute based on the telecommunications service portion alone, and if that portion were unidentifiable, then on the total revenue from the bundled offering.[126] Here, the Consumer Advocates submit that the existing contribution mechanism under the CPE/Enhanced Service Bundling Order is consistent with the classification scheme outlined above.

9.3 The FCC Should Require Wireline Broadband Internet Access Service Providers To Contribute To Universal Service Support Because It Is In The Public Interest For Those Providers To Contribute To The Preservation And Advancement Of Universal Service

The FCC has determined that it is in the public interest for some non-common carriers of interstate telecommunications to contribute to universal service.[127] In the 1997 First Report and

124. NPRM at ¶74 (emphasis added).

125. NPRM at ¶72, citing to CPE/Enhanced Services Bundling Order, 16 FCC Rcd at 7446-7447, ¶48.

126. Id.

127. Federal-State Joint Board on Universal Service, CC- Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 9183, para. 795 (1997) ("First Report and Order"). The Consumer

Order, the FCC based that determination, in part, on the principle of competitive neutrality. There the FCC reasoned that universal service contributions were in the public interest because it universal service contributions should not distort business decisions or to discourage providers from offering common carrier services.[128] The FCC also reasoned that those contributions were in the public interest because requiring contributions from those non-common carriers would lessen the possibility that carriers without contribution obligations would compete unfairly against common carriers with contribution obligations.[129] Next, the FCC reasoned that requiring non-common carriers to make universal service contributions was in the public interest because it would expand the base upon which universal service funds are assessed and would reduce the contribution requirements on any particular class of telecommunications provider.[130] Here, the FCC should employ the same reasoning it used in the First Report and Order to find that wireline broadband Internet access providers must contribute to universal service support.

The FCC should determine that all wireline broadband Internet access providers should contribute to universal service support on the basis of competitive neutrality. Although this raises the question of competitive neutrality between wireline, cable modem, and other Internet access platforms, the Consumer Advocates assert that the FCC should here concern itself with the protection of universal access to the PSTN, and not in the protection of different technological platforms.[131] Thus, the Consumer Advocates assert that it would be proper for the FCC, as it did in the First Report and Order, to require all platforms that access the PSTN as part

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Advocates submit that the term "non-common carriers" better describes the private providers addressed in the First Report and Order.

128. First Report and Order at 9183, ¶795.

129. First Report and Order at 9183, ¶795.

130. First Report and Order at 9183-84, ¶795.

131. Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, et al., Docket Nos. GN 00-185, CS 02-52, Declaratory Ruling And Notice Of Proposed Rulemaking, Para 110 ("Cable Modem Proceeding") (2002). In the Cable Modem Proceeding, the FCC refrained from determining whether cable modem-based Internet access providers should be required to contribute to universal service, instead deferring to this proceeding to resolve the issue.

of providing broadband service to contribute to universal service support. In the First Report and Order the FCC adopted an expansive reading of provider obligations regarding universal service, and the Consumer Advocates now encourage the Commission to retain that approach here.

The FCC should also not limit the sources upon which universal service support may be assessed. To do so inherently creates competitive bias by painting basic universal service, and the technologies that do and will rely on it, into an ever-smaller corner of a growing telecommunications market. As it did in the First Report and Order, the FCC should take an expansive approach to universal service support and increase the base upon which the fund is assessed, and thus reduce the contribution requirements on any particular class of broadband access provider. That way, the FCC can preserve the competitive status quo, and at the same time, increase the value of the PSTN to the competitors who operate upon it and to the public as whole.

The consumers who may currently use broadband services for voice transmission do so at considerably reduced costs from current voice transmission services, if not completely free. These calls do not support universal service and do not have other regulatory protections, as do other wireline calls. Should the use of these wireline broadband Internet access services for voice transmission dramatically increase, an even larger portion of universal service will disappear. This prospect applies equally to voice-data-video convergence, and the FCC should have the foresight to recognize this potential path of evolution and to ensure that such trends do not further jeopardize existing universal support systems.

As they relate to these Comments, several universal service funding issues argue for the expansion of the categories that contribute to universal service. First, the size of the universal service fund is expanding. Second, the funding base of universal service is not expanding as rapidly as the fund.[132] Therefore, if broadband services are excluded from the contribution base,

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132. In comments filed April 22, 2002 in CC Docket 96-45, the National Association of State Utility Consumer Advocates (NASUCA), to which the Consumer Advocates here belong, submitted comments that demonstrate that the current universal service funding base is not shrinking.

universal service funding assessments will increase all the more as against current voice service contributors. Concerning Internet access, the FCC should note that most people who access the Internet do so via a dial-up voice grade line.[133] Therefore, the FCC should now develop universal service contribution rules with an eye towards how the majority of Americans will access the Internet in the foreseeable future.

The FCC should require those Internet access providers who operate on, or provide access to persons and entities through the PSTN to contribute to universal service support, including cable modem access providers. The Consumer Advocates assert that the FCC should adopt the position that all Internet access providers should contribute to universal service support no matter the medium through which those wireline broadband Internet access providers supply public access. The FCC should make that determination because it is not now clear how access to the Internet will be accomplished in the future. It does appear reasonably certain, however, that the PSTN will play an important role in the future of Internet access. Although the Consumer Advocates will not here attempt to resolve this issue because it will most likely change in the future, they do note that the FCC should not draw a technological "bright line" cut-off for universal service funding an era of sweeping technological change.

9.4 This Commission Should Require Wireline Broadband Internet Access Service Providers To Contribute To Universal Service Support Because Those Providers Have Built Their Businesses Upon The Value Subscribers Place On High-speed Access To Content Available Through The Public Switched Telephone Network

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133. In its Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket 98-146, Third Report, (February 6, 2002) ("Third Report"), FCC research concluded that a total of 9,616,341 Americans currently use a high-speed provider to access the Internet. Third Report at Table 5. In contrast, dial-up access provider AOL had 33 Million customers in early 2002 and MSN had 8 million. Elkin, Tobi, Digital Domain: MSN goes after "valuable users": Global expansion, broadband key in quest to counter AOL, Advertising Age, March 4, 2002. Those dial up numbers do not count the myriad numbers of local dial-up access providers spread throughout the United States.

In the past, the FCC has determined that it is in the public interest for entities that derive value from access to the PSTN to contribute to the support of that network. Using that rationale in the First Report and Order, the FCC required providers of interstate telecommunications to contribute to universal service.[134] In that instance, the FCC justified its conclusion by determining that those telecommunications providers: 1) built their businesses, in full or in part, on access to the public switched network; 2) compete with common carriers; and 3) were exempt from common carrier status solely as a result of the structure of their business operations.[135] The Consumer Advocates have discussed the second and third factors *supra.* This section will focus on the first factor, the extent to which wireline broadband Internet access providers build their businesses off their access to the PSTN. This particular issue may better be considered by asking this question: what is the value, to the public, of broadband Internet service without access to the PSTN? The Consumer Advocates assert that a network isolated from the PSTN would be of substantially less value to the public than the broadband Internet service that the FCC seeks to encourage through this NPRM.

As an electronic medium, the Internet in the 21st Century is no different from its predecessor electronic media in the 20th Century. For example, the value of telephone service increases exponentially as more and more persons obtain telephones. The social utility of wide-scale access to the PSTN is at the core of the Congressional mandate that the FCC support and advance universal access to the PSTN; this concept is the keystone of our current Universal Service Fund.

The fact that wireline broadband Internet access providers slice a local loop into discrete use categories does not eliminate the fact the local loop is a part of the existing PSTN. Part and parcel of the advantage derived by wireline broadband Internet access providers includes the value wireline broadband Internet access providers derive from the expansion and maintenance of the entire network, including rural, insular, and high cost areas. As the network expands, and Internet access increases, the value of broadband Internet service increases likewise.

134. NPRM at ¶71.

135. NPRM at ¶71.

In fact, public access and use of the Internet presents an analogous, if not identical, model to the development of telephone service in the United States. Like telephone usage, the social utility of Internet access will increase exponentially as more and more consumers use the Internet to communicate, shop, and to conduct business. The expansion of Internet usage is well underway.[136] Wireline broadband Internet access providers derive substantial value from the growth of the public's Internet use. The PSTN is an integral part of how wireline broadband Internet access providers position themselves as valuable services to Internet users. For example, the ability to use email as a means of communication with friends, family, and business contacts is keyed to the PSTN. That is true because so many Americans have access to the Internet through dial-up providers.[137] In addition, advances in telephony now provide consumers with high-speed broadband Internet connections the ability to make telephone calls via the Internet. Thus, the value that wireline broadband Internet access providers derive from access to the PSTN is enormous. Therefore, the FCC should require wireline broadband Internet access providers to contribute to universal service for the good of not only voice-grade service, but also to promote the public interest in the Internet as well.

136. Third Report at ¶30.

137. See supra note 16.

10 CONCLUSION

WHEREFORE, the Pennsylvania Office of Consumer Advocate, the Maine Public Advocate, the Maryland Office of People's Counsel, the Ohio Consumers' Counsel, the California Office of Ratepayer Advocates, the Connecticut Office of Consumer Advocate, the New Hampshire Office of Consumer Advocate, and The Utility Reform Network respectfully request that the Federal Communications Commission consider these Comments when analyzing the legal and policy framework of broadband access to the Internet provided over domestic wireline facilities. In particular, the Consumer Advocates submits that the FCC should not reclassify wireline broadband Internet access services as "information services".

Respectfully submitted,

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APPENDIX ONE

Four Criteria For Cost Allocation In The Presence Of Market Determined Prices

The Consumer Advocates recommend the application of four basic criteria for determining which telecommunications costs should be shared by broadband Internet access services that use telecommunications transmission:

1. Incremental Cost Floor. The implied cost-covering price of broadband transmission must be such that each consumer, and any group of consumers directly or implicitly purchasing broadband services from a wireline telephony company, should at least cover the costs directly attributable to the telecommunications transmission used by those consumers (price should cover incremental cost)[138];

2. Demand-Based Shared Cost Recovery. Shared costs should be recovered through a contribution from purchases of the various shared products. In particular, where prices are determined to an important extent by competitive forces, shared cost recovery should be related to demand.[139] In the case of wholesale broadband transmission, demand valuation is either directly observed as the market price or can be implied from retail broadband Internet access prices. In comparison to Title II services, such market prices are to a significant extent determined by competition from independent suppliers, that is, by forces independent of the wireline supplier. Moreover, our reliance on the market is responsive to the clear mandate from Congress that non-supported services pay no less than their reasonable share of joint and common costs.[140]

138. An exception to this rule would be cases where provision of universal service requires prices below incremental costs in high-cost areas (e.g., remote rural areas).

139. For universal service purposes, some prices for basic services may need to be established below cost.

140. 47 U.S.C. § 254(k).

3. Stand-Alone Cost Ceiling. The implied cost-covering price of broadband transmission service to purchasing broadband Internet access service providers should not exceed what broadband Internet access service providers would be willing to pay if they were allowed to pursue their own self-interest. That is, price regulation should not imply inefficient participation or prices that exceed stand-alone cost, noting that stand-alone cost may be the cost of purchase from competing independent suppliers; and

4. Competitive Benchmark. The proposed contribution to shared costs should not be less than the contribution possible at commercially determined prices for broadband transmission. The contribution possible at commercial prices for broadband transmission is the commercial price less the incremental cost of broadband transmission. Put another way, after costs are allocated to broadband transmission, the implied cost-covering price of broadband transmission -- its incremental cost plus shared-cost allocation -- should not be less than the price of the broadband transmission service purchased from independent sources (regulation should enforce a competitive and level playing field). This is also consistent with the fact that ratepayers have born the risk of cost changes in the past (the regulatory pact essentially guaranteeing the regulated firm a fair return on its investments. Now that broadband demand provides an alternative source of contribution toward shared costs, these should accrue to the ratepayer, rather than the firm.

1.1 The Incremental Cost Floor Criterion

The first criterion, that price should at least cover incremental cost, is well known and is a basic requirement of economic efficiency.[141] The incremental costs of broadband transmission are those costs directly attributable to the service given all other services currently provided. Such costs are incurred only because the service was provided, and except for service provision would not otherwise be so incurred. Efficiency demands that price at least covers incremental

141. To set such prices efficiently also requires taking account of the subscriber network externality. Further, such prices would be constrained by other social goals -- for example, due to universal service obligations. In either case, the resultant regulated price may even fall below private incremental cost (to account for the externality) and even below the social incremental cost where other policy goals demand this.

cost since this ensures consumption only occurs when consumers value the service more than its cost.

Use of incremental cost as a minimum price floor does not provide any guidance as to what cost allocation should be made toward shared costs, which by definition are not incremental. For example, prices that just cover incremental costs imply no allocation should be made for shared costs.

1.2 Demand-Based Shared Cost Recovery Criterion

The second criterion is that shared cost recovery, where prices are determined to an important extent by competitive forces, should be related to demand. The theoretically optimal approach would recover per subscriber shared costs according to shared product pricing, and costs that are shared among more than one subscriber through mark-ups over costs distributed to minimize efficiency losses. This optimal approach is impractical for implementing such prices. However, the merits of the approach recommended by the Consumer Advocates are that it represents a good approximation to the theoretical optimal.

If costs were shared over several products, but directly attributable to a single subscriber, such as the copper line solely dedicated to a single subscriber, a competitive market would efficiently allocates costs according to Marshall's analysis of competitive shared production (wool and mutton from a sheep).

The sum of all product prices would recover all costs. The price for each service would equal that service's incremental cost plus a contribution to the shared cost. The contribution to the shared cost would be proportional to consumer valuation when total prices covered cost.[142]

142. Strictly, this is only true if market forces do not result in a corner solution. In a corner solution, demand for one or several services is sufficiently large that at least one service makes no contribution to shared costs. Such non-contributing services are each priced at their own incremental cost and demand for these services at this price requires less of the shared input than demand for the other products. For example, imagine demand for wool to be sufficient to pay

A range of access costs are shared over more than one customer, so are not attributable to a single customer. Costs of this type are efficiently recovered by taxing each service according to the level of demand for the different products. This minimizes the efficiency loss associated with having to set prices which are greater than incremental (social) cost to ensure that shared costs are recovered. Moreover, the efficient mark-ups are probably too complex to calculate, requiring knowledge of demand elasticities including cross-price elasticities. However, the underlying message of the theory of setting optimal prices to recover costs shared over more than one customer is that:

- cost recovery should be conducted across as broad a base as possible;
- prices must be supported by demand; and
- prices should just recover costs.

Translated to the present context, all products, including broadband transmission, should contribute toward the recovery of shared costs in a manner consistent with demand. All prices should provide a contribution towards the shared costs but should be less than the value consumers place on the product. The price must be less than the value, otherwise customers will not buy the product.

Since optimal prices are not readily identified, some additional criteria are required to determine a second-best cost-allocation. These are now considered.

1.3 The Stand-Alone Cost Ceiling Criterion

for the whole cost of 100 sheep plus its own incremental cost, while the demand for mutton only requires 50 sheep when the price of mutton is set to its marginal cost. In this circumstance, it is optimal for the price of wool to cover the entire cost of the sheep as well as the incremental cost of producing wool, while the price of mutton simply covers its own incremental cost. A competitive market would produce this outcome.

The third criterion, that price should not exceed stand-alone cost, is also well accepted. Stand-alone cost is the cost of self-supply, which includes the possibility of purchase from independent suppliers. In the case at hand, independent supply could come from a range of sources including cable television, wireless local loop, wireless broadband, and satellite operators.

If the cost-recovering price implied by a given allocation exceeds stand-alone cost, then either the supplier cannot recover costs or consumers must be coerced to make the required purchase. It would, of course, be unfair to impose a cost on suppliers that could not be recovered, and it would also be inefficient. The telephone company could seek to subsidize broadband transmission from the retail component of the broadband Internet access service. However, this would put the wireless supplier at a cost disadvantage in competing with other retail broadband Internet access suppliers thereby distorting supply. The price it implicitly pays for transmission exceeds what it would pay if it purchased broadband transmission from its rivals, a burden its competitors do not have to meet.

Further, inefficient investment incentives would result whether the wireline firm managed to recover costs on the retail leg, despite competition from unencumbered rivals, or whether it simply failed to recover its cost. In both cases, the return received by the wireline firm would not signal that investment was profitable when it was socially optimal. Similarly, besides being unfair, coercing a consumer to purchase from the wireline carrier at above stand-alone cost is likely to be inefficient because it:

- constrains competitive responses which would otherwise enforce efficiency (consumers are prevented from choosing independent suppliers); and

- will encourage inefficiency on the part of the supplier entitled to the implied prices and the revenues over and above stand-alone cost, since they guarantee the wireline company more funds from consumers than could be earned if competitive pressures were allowed to impact on the wireline firm.

As a result, stand-alone cost, being the price of competitive alternatives, less the incremental cost of broadband service, provides an upper limit on a sensible cost allocation. In choosing a particular cost contribution from broadband transmission for shared telecommunication costs, the regulator implies a cost-recovering price for broadband transmission. That price is the incremental cost of transmission plus the allocated cost. The Consumer Advocates argue that this implied cost-covering price should not exceed stand-alone cost. Stand-alone cost, in this case, can be no higher than the price of an equivalent market alternative (since this option is available to purchasers). Therefore, the cost allocation should not be so large that, when added to the incremental cost, the sum exceeds the market price.

Put in another way, setting the cost allocation (such that when added to incremental cost the total does not exceed the lowest price of the firm's rivals) is consistent with replicating workable competition. In a workably competitive market, the wireline telecommunications carrier could not survive by setting its broadband transmission prices above those of equivalent service provided by its competitors. Therefore, the regulator should not impose costs that would imply such prices.

In the case of broadband transmission for retail broadband Internet access services, the stand-alone cost criterion in many instances is likely to provide a substantive constraint on cost sharing options, for example, where cable networks provide competition through cable modem technology (for example, as in the case with AT&T Broadband and AOL-Time Warner).

1.4 The Competitive Benchmark Criterion

The fourth and last criterion requires that the lowest cost contribution to the wireline firm's shared telecommunications costs be at least equal to the stand-alone cost less the wireline carrier's incremental cost of the service. Given the very large proportion of shared costs in wireline transmission, the stand-alone cost most likely will be similar to the price of independent suppliers (as this is likely to be lower than stand-alone supply on a telecommunications network). The cost allocation implied then would be the price of third party supply of broadband

transmission less the incremental cost of that transmission. This benchmark has three benefits, but also an important cost. The benefits are:

1. It maintains a level playing field (at least as far as regulation is concerned) between broadband over wireline telephony and other technologies. In setting a cost-allocation rule for broadband transmission, the regulator implies a cost-covering broadband transmission price, being the incremental cost of that service plus the shared costs allocated to it. Such a cost allocation ensures no contributions to shared costs from the regulated base are used to unfairly compete with rival suppliers. If the cost allocation implies a cost-covering price that is less than that of independent rivals, then the wireline firm can subsidize its broadband Internet access service from its regulated base at the expense of competition. This implies a higher price for regulated monopolized services than would otherwise obtain, and a threat to competition in the supply of broadband transmission and broadband Internet access. Instead, an allocation that implies brings the cost-recovering price to the level of market prices provides the wireline firm with a strong incentive to price at the level of its competition.

2. It imposes a price on the wireline telecommunications carrier similar to that which can emerge under workable competition. In effectively competitive markets, when firm's costs differ, the least cost firm is able to claim unit rents (almost) equal to the difference between its own costs, and that of its nearest rival. It achieves this by setting its price very close to that of its nearest rival's costs.[143] In short, by imposing a cost allocation equal to the difference between the wireline firm's incremental cost of broadband transmission and the lowest wholesale price of a rival for the same, the regulator does no

143. The classic textbook example of this kind of behavior is Bertrand competition. Firms do not always seek maximal short run profits. Sometimes they choose to forego some amount of this margin to claim market share, because this maximizes long run profits, for example, by exploiting economies of scale. However, the basic message remains the same. The advantage gained by being more efficient is at least equal to the cost difference between the most efficient producer and its nearest rival. Further, this advantage provides firms with incentives to innovate. It is likely the benefits generated by such innovation dominate the more usual allocative gains attributed to competition in textbooks.

more than impose a price very similar to that which can emerge in a workably competitive market; and

3. The result is a relatively light-handed form of regulation, which is especially important in an emerging market, such as that for broadband Internet access services. It is clear that the Act requires broadband transmission to contribute toward shared telecommunications costs, and in any case, this is necessary for competitive neutrality and to reduce the prospect of anti-competitive behavior (as already noted). However, regulation in new markets should also be kept to a minimum to allow the market to first deal with problems that emerge, rather than entrenching outcomes through unnecessary regulation. The Consumer Advocates' recommendation meets both the need for oversight and the need for it to be light and market-oriented.

APPENDIX TWO

Setting The Cost Allocation When Wholesale Prices Are Not Available

In this appendix, we illustrate how one would determine the cost allocation for broadband transmission in localities where wholesale broadband transmission services are not independently priced.

Retail broadband access is almost universally commercially provided by independent suppliers. As a result, an implied wholesale price can be derived by subtracting from the known retail broadband Internet access price an estimate of the retailing costs of broadband Internet access services. Once an implied wholesale price is known, broadband transmission's cost contribution can be determined in the manner outlined in Section 5 of the text. However, relying on retail prices to determine the wholesale prices probably is inappropriate when the retail price is exceptionally high. Section 2.1 of this Appendix illustrates how wholesale prices can be estimated in areas where only retail prices exist. Section 2.2 considers the problem that arises when the lowest available retail price is too high.

2.1 Setting the Cost Allocation Using Retail Prices of Independent Suppliers to Determine Wholesale Prices

A good first approximation of the retailing costs of broadband Internet access services can be obtained from those markets where independent suppliers provide wholesale broadband transmission, being the observed margin between retail Internet access and wholesale broadband transmission prices.[144] Alternatively, existing estimates of retailing costs could be used or such estimates developed. An example will make this clearer.

144. Within any given area, the margin between retail and wholesale prices would exaggerate the incremental costs of retailing to the extent there was market power in retail services, but underestimate it, to the extent it captured short run marketing discounts. Aside from these factors, the margin in one area, in the case of the supply of retail broadband Internet access, is a good approximation for retailing costs in other areas, because retailing costs are unlikely to vary significantly from one region to another for at least two reasons. First, most firms operate interregional marketing campaigns, with fixed costs incurred over the targeted regions. Even a local cable company's franchise area typically covers a substantial variety of customer-types and locations. Secondly, the fundamentals of marketing do not vary substantially from place to

New Orleans is an area where wholesale broadband Internet transmission is not commercially provided by an independent supplier. In New Orleans, BellSouth is the local wireline and hence DSL provider. Many consumers can purchase broadband access (cable modem service) directly from the cable franchisee, Cox Cable, for $39.95/month.[145] At least two other options are also available in the New Orleans area through satellite service, for example, as provided by DirecWay for $59.99/month,[146] or Starband for $69/month.[147] Such service would not generally interest consumers that have access to DSL or cable modem service. Cox Cable, DirecWay and Starband do not supply wholesale broadband transmission to retail broadband Internet access service providers.

Assume Bell South's incremental cost of broadband transmission is $16.32/month.[148] Cox is the independent supplier with the lowest retail prices in New Orleans. To estimate Cox's implied wholesale broadband transmission price requires an estimate of Cox's retail broadband

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place. Most particularly, the cost of acquiring and maintaining customers does not change dramatically from one broad region to another.

145. Cable modem service is often bundled with cable television service (as per www.cox.com at 11 April 2002). For simplicity, installation fees are ignored.

146. DirecWay uses a two-way satellite dish to provide download speeds of up to 400 Kb/s and upload speeds of up to 128 Kb/s (see www.directv/dtvapp/imagine/InternetAccess.jsp). The DirecWay average download speed appears to be at least several times faster than 56 Kb/s (see www.dtv.direcway.com/home/why/experience.html). The service is available anywhere in the continental USA with a clear view of the Southern sky (see www.dtv.direcway.com/home/why/fac.html). Access involves a sub-second lag, so Internet applications requiring very rapid responses are not suited to the service. DirecWay charges a start-up fee of $579.98 plus $59.99/month, or $99.99 up front and then $99.99 per month for 12 months and thereafter $59.99 per month (www.dtv.direcway.com/home/index.html at 11 April 2002).

147. Starband markets its service through independent operators across the country, but most supply the service at this price. A dish must be bought (at approximately $500) and there is an installation fee (approximately $250). The service is otherwise quite similar to that of DirecWay (see footnote 146), but is also available in Hawaii and Alaska (see http://www.starband.com/whatis/index.htm).

148. See supra note 70.

access costs. Since this is not currently available, retailing costs from the example used in Section 5.2 can serve as a first approximation. These are not likely to exceed $8.98, the difference between standard retail and wholesale prices ($8.98 = $35.95[149] - $26.97[150]). Subtracting $8.98 from Cox's retail price of $39.95 as a proxy gives an implied independent wholesale broadband transmission price of $30.97. The monthly cost-allocation in New Orleans then would be $14.65, that is, $30.97 less Bell South's incremental cost of broadband transmission, $16.32, or close something over half of the shared loop cost.

2.2 Setting the Cost Allocation When Wholesale Prices Are Unavailable and Retail Prices Are Excessive

Some telephony customers do not have the option of cable modem service. In these circumstances, one approach would be to use satellite prices, as these are posted by independent suppliers. However, this would likely result in rather large cost allocations. Instead, the Consumer Advocates recommend applying the lowest wholesale price, implied or actual, of the closest independent cable supplier or equivalent. An extension of the example outlined in the previous section will make this clearer.

Assume, after accounting for installation and equipment costs, that the cheapest alternative service not supplied over BellSouth's wireline network is DirecWay. For customers not supplied by Cox, the DirecWay service price would apply. The appropriate calculation suggests a cost contribution of something greater than $33.72.[151] If the cost allocation does not exceed the shared local loop cost, as would be the case for some high cost regions, such a cost allocation would be appropriate. However, in the New Orleans area, $33.72 would typically

149. See e.g., https://bisorder.att.com/step3AddressDetail.cfm?houseIdList=94563392110155&cspInstance=2509677&CFID=1222240&CFTOKEN=68375204, 24 April 2002.

150. See supra table 1, row (e).

151. This is calculated as before, but DirecWay's price is substituted for Cox's: $33.72 = $59.99 – $9.95 – $16.32. However, the true retail price of DirecWay's service must account for the upfront fee of $579.98 and so would be higher than $59.99.

exceed the actual total shared cost of the local loop. There are two possible responses to the situation where the cost allocation exceeds the shared cost of the local loop:

1. the logic of market pricing could still be applied, but the actual allocation limited to the level of the total shared cost; or
2. the regulator could decide the market price is excessive on the basis of equity or efficiency grounds, and a regulated solution applied.

In these circumstances, where it is possible to regulate retail prices, the consumer advocates prefer the second option. Our reasoning will be made clear by discussing each option in turn. That is, in no case should more the entire shared cost of the service be allocated to the DSL service. Even with such a cap, the implied cost-covering broadband transmission price could be considerably above that for areas supplied by cable modem service. For example, if the actual shared local loop cost was $18, then only $18 could be allocated. In the example just given, the implied cost-covering price for broadband transmission would be $34.32 (= $18 + $16.32), somewhat above the implied cost-covering price of $30.97 where Cox Cable operates, but still below those of the cheapest alternative ($59.99 offered by the satellite operator). This, of course, reduces the cost of voice telephony to subscribers which purchase broadband service, but there is a price to pay. The wireline firm can set its retail prices well above the level of cost-recovery, as it is neither regulated nor constrained by competition (at least so long as it sets a price less than $59.99). The advantage of this approach is that retail prices will be related to the economic cost of the resources necessary to supply ***alternative*** retail broadband Internet service in the affected area. It thereby provides market-like incentives to investors that might find a cheaper way of providing alternative broadband facilities.

In the Consumer Advocates' view, it would be inappropriate to set such a high cost allocation, ***assuming retail prices could be separately regulated***.[152] While emulating the market, this may not be efficient. As discussed in the previous appendix, it is generally efficiency-enhancing to recover shared costs from as broad a base as possible. That is, placing the entire burden on broadband transmission is likely inefficient. Further, ensuring price no more than

152. If the retail price level is outside of the regulator's control, the welfare loss from too high prices will occur regardless of which cost allocation approach is provided. Since these are pure profits, it is then optimal to allocate the total shared cost of the loop to broadband transmission.

recovers costs in these circumstances is likely to produce greater benefits in terms of allocative efficiency, even after accounting for the costs of regulation, than the expected benefits generated by allowing a highly profitable price which may generate entry. Over the long run, an absence of regulation could lead to entry and raise efficiency because of the constraint it places on the wireline firm. However, especially in areas where the cost of alternative broadband provision is high, such an effect would be weak and would likely be dominated by the allocative loss due to prices lying sufficiently far above the wireline firm's costs.

May 3, 2002

Office of the Secretary
Federal Communications Commission
445 12th Street, S. W.
Washington, DC 20554

In the Matter of: Appropriate Framework for Broadband Access to the Internet over Wireline Facilities
CC Docket No. 02-33
Universal Service Obligations of Broadband Providers
CC Docket No. 95-20, 98-10

Dear Secretary:

Enclosed please find an original and four copies of the State Consumer Advocates Comments in the above-referenced matter. Please also note that these Comments have been filed with the Commission electronically.

Please indicate your receipt of this filing on the additional copy provided and return it to the undersigned in the enclosed self-addressed, postage prepaid, envelope. Thank you.

Sincerely yours,

Joel H. Cheskis
Assistant Consumer Advocate

Enclosure

cc: Qualex International

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	:	
Appropriate Framework for Broadband	:	CC Docket No. 02-33
Access to the Internet over Wireline Facilities	:	
	:	
Universal Service Obligations of Broadband Providers	:	CC Docket No. 95-20, 98-10

I hereby certify that I have this day served a true copy of the foregoing document, State Consumer Advocate's Comments, upon parties of record in this proceeding.

Dated this 3rd day of May, 2002.

Respectfully submitted,

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